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THE
MEDICAL GUIDE,
 FOR THE USE OF THE
 CLERGY, HEADS OF FAMILIES, AND PRACTITIONERS
 IN MEDICINE AND SURGERY:
 COMPRISING A
PRACTICAL DISPENSATORY,
 AND A
POPULAR TREATISE
 ON THE
 SYMPTOMS, CAUSES, PREVENTION, AND CURE,
 OF THE
DISEASES INCIDENT TO THE HUMAN
FRAME;
 WITH
 THE LATEST IMPORTANT DISCOVERIES IN MEDICINE.

By **RICHARD REECE, M. D.**

*Member of the Faculty of Physicians and Surgeons; Fellow of the Royal College of
 Surgeons in London; Author of the Practical Dictionary
 of Domestic Medicine, &c. &c.*

EIGHTH EDITION,

CONSIDERABLY ENLARGED AND IMPROVED.

*Omnes homines artem medicam nosse oportet.—Sapientiæ cognitionem medicinæ
 sororem ac contubernalem esse puto.....Hippocrates.*

*Qui studet optatam cursu contingere metam
 Multa ferat faciatque.*

LONDON:

PRINTED FOR LONGMAN, HURST, REES, ORME, AND BROWN,
 PATERNOSTER-ROW.

1811.



H. Bryer, Printer, Bridge Street, Blackfriars, London.

TO THE
RIGHT REVEREND
RICHARD WATSON, D.D.

LORD BISHOP OF LANDAFF,

&c. &c.

MY LORD,

SINCE I had the honor of inscribing the Medical Guide to your Lordship, several large editions have been required by the continued, and increasing demand of the public for the work. I cannot doubt that the sanction of so respectable a name, has greatly contributed to procure for it the confidence it has obtained from the parochial Clergy, heads of families, and the many excellent persons who devote their lives to the relief of the sufferings of those, who are unable to apply on every occasion of sickness to the regular practitioner. It has been my endeavour to render every successive edition, more worthy of your Lordship's patronage and the public approbation. Every improvement which has been made in medical practice has been carefully introduced; the sentiments of the most respectable medical authors have been adverted to; the properties of some new and powerful medicines have been noticed, with their proper mode of administration, and the effects of regimen in obstinate chronic affections, have received

that just regard, which the importance, and, in a measure, the novelty of the subject have seemed to require.

I may say, then, I hope without the imputation of vanity, that, if the Medical Guide was not, in its former edition, unworthy your Lordship's protection, in its present form it has much more powerful claims to this honorable distinction.

It is a happy feature in modern manners that medicine is no longer the property of a privileged order—To every individual health is the most valuable of sublunary possessions ; it is fit, therefore, that all should be instructed in the methods of restoring or preserving health, as far as is compatible with the ordinary vocations of life. To promote this salutary purpose, has been the great object of the attention I have paid to these subjects for many years. I cannot doubt that a persuasion of the sincerity of these professions has procured for me the patronage of a Prelate so eminently distinguished for talents, benevolence, and liberality of sentiment.

I have the honor to be,

With the greatest respect,

MY LORD,

Your Lordship's very obedient, and

Much obliged Servant,

RICHARD REECE.

20, Bedford Street, Covent-Garden,

Sept. 6, 1811.

PREFACE.

IN a profession so destitute of real science as that of medicine, it is to be expected that jealousy and illiberality will prevail. Hence it is common for medical men to speak in terms of contempt of works of domestic medicine. To every person, health is the most valuable possession; it is therefore fit that all should be acquainted with the best known methods of preserving and restoring it. Of those who condemn domestic medicine, and decry all attempts to inform the mass of mankind on the nature and treatment of diseases, surely the public has an undoubted right to enquire to what degree of perfection the healing art is brought, and why the practice of medicine should be confined to a privileged Class? That such is the deplorable deficiency of science in medicine, that there does not exist a fundamental principle on which Physicians have a general agreement; no medical man can deny. Even in diseases of common occurrence, it very rarely happens, that two medical men accord in their opinions either of the causes, the nature, or the mode of treatment of the malady! How common is it for Physicians in the same disease to recommend plans of treatment diametrically opposite to each other! If such diversity of opinions exists among medical men, surely it ill becomes them to oppose domestic medicine. Some degree of disease has pervaded all communities, and it is therefore natural for all to wish to be acquainted with the

best established means of preserving and restoring health, and of alleviating the sufferings of sickness. No medical man of a liberal, or benevolent mind would condemn a work that is calculated to diffuse such important instructions among his fellow creatures, especially as it performs no small service to professional men of skill and judgment; for it is the total ignorance of the people that makes the practice irksome to men of scientific attainments; it is this which screens pretenders and impostors, and puts them on a level with men of real merit. This is in fact the principal reason that invites many members to decry all attempts to acquaint the public with the extent of their art. The pretender shrinks from the scrutinizing eye of intelligence; he knows that the man of sense and knowledge will distinguish those who merit his confidence; besides, a man so instructed will cheerfully resign himself to the guidance of honest and judicious practitioners, and calmly submit to afflictions which form a part of his condition in this transitory existence.

The Physicians who have obtained their degrees at Oxford and Cambridge, style themselves *regular Physicians*, although these universities, it is well known, are no longer proper schools of medicine: not even the rudiments being taught there. They become intitled to a doctor's degree in consequence of having kept a certain number of terms, although no part of their time was devoted to the study of medicine. Such men, with a knowledge of technical terms, set up as Physicians, and under the assumed title of *regular Physicians*, would have it to be

understood that all others are impostors. No man should be allowed to practice as a Physician who is not acquainted with surgery, anatomy, chemistry, and the *materia medica*. He should be able to concentrate the rays of each upon the great question of practice, to decide with sober judgment the doubtful points that so frequently occur in the practice of medicine. A knowledge of surgery is essentially necessary to enable him to judge of the state of the constitution, from the characters of different local diseases, and to cure local derangements by constitutional remedies. Morbid actions are again to be accounted for upon chemical principles, and are to be counteracted and cured by chemical agents; how then is it possible that a practitioner can be a good Physician who is ignorant both of surgery and chemistry? and yet not one in a hundred of our modern Physicians is acquainted with these departments!!

Such is the enlightened state of society, that every man, is in some degree a judge of the sciences. Medicine, in which our dearest interests, life and death are concerned, has been of late years so much cultivated in this country, as to form more or less with every person an object of particular attention. The desire of the public has been seconded by a few medical practitioners; but their works have been found either too limited, or deficient in the leading points, which a reader requires to know, by an accurate definition of diseases, and a decisive clear mode of treating them. This objection particularly applies to the well known work of the late Dr. Buchan; whose definitions of diseases, are so loose, as to have

led readers into the grossest mistakes, and often dangerous errors, respecting the nature of their complaints; nor is his practice less exceptionable. Timid and inert it has the negative merit of doing little harm, if it produces no good, which may be considered to be as great a deception on the public as the most glaring empiricism; for, by trusting to its maxims, the opportunity of restoring health, by a judicious and active treatment is often lost, never to be recalled; and thus a sacrifice is made of life, by what may be termed worse than neglect, scientific supineness, and the use of placebos. Besides, Dr. Buchan's Domestic Medicine, on its first appearance, was a mere compilation from preceding writers, and what is very extraordinary, that although medical science has been considerably enriched since that time, by many important discoveries, even the last edition of the Domestic Medicine does not contain the slightest notice of them. Dr. Buchan being a Physician of very limited practice, was probably either not sufficiently acquainted with those discoveries, or incompetent to judge of their real merits.

In consequence of the diffusion of a knowledge of medicine, the best informed apply in all cases of indisposition, to those Physicians and Apothecaries, who have been educated in the school of Surgery, so that the practice of physic in this country is nearly in the hands of Surgeons, as has long been the case on the Continent, and if it were entirely so, we should hear less of internal organic diseases, which, by the patient trusting to the directions of men unacquainted with the nature and pro-

gress of diseased structure, are allowed to arrive to an incurable stage before the aid of a surgeon is resorted to*. The immortal Hippocrates, and Galen, were equally eminent as Surgeons and Physicians; and Boerhaave was also an excellent chemist. The success of a Physician of the present day is calculated by the number of his fees!! so occupied is his mind in the means of accumulating wealth, that it is a melancholy fact that a Physician who has been in an extensive practice for fifty years, has not been able to leave one useful practical remark behind him. He only bestows pains to enrich himself. To generalize facts, and to reduce them to scientific principles, are totally foreign from his pursuits. For the sake of notoriety he will broach the most absurd doctrines; and when he publishes a work, his object is an advertisement merely to bring his name before the public eye.†—Of such Physicians Mr. JOHN BELL, an eminent Surgeon in Edinburgh, gives the following very just description:—A trading Physician (says he) would be ruined by thinking! the hours fly, and he

* The practitioner who has studied the natural and morbid structure of the internal organs, is surely better qualified to undertake the treatment of their diseases, than the person who is unacquainted with them.—Diseased structure, whether externally or internally situated, is the province of the surgeon, and the disturbance of the general health, claimed by the Physician, is generally, if not always, symptomatic of some affection of the internal organs, on the removal of which, the recovery, or at least the permanent health of the patient depends.

† These gentlemen exclaim violently against Domestic writers, although the sole object they have in view in their publications is to attract public notice.—They are fully aware that their works are not purchased by medical men, and are read only by those who are afflicted with the disease on which they treat.

is in haste to prescribe ;—one would think, as the chariot drives furiously along, that he was chasing death before him out of every avenue.—He is simply overtaking time, coursing through practice.—

“ All rush rapacious friends o’er trodden friends,
O’er just, o’er sacred, all forbidden grounds,
To snatch the *Golden* showers.”

Sickness and anguish is his harvest ; he rejoices to hear that they have fallen on any of his friends ; he looks black and disconsolate when all men are at their ease. The fantastic valetudinarian is his particular prey. He listens to his frivolous tale of symptoms with inflexible gravity ; he pretends to be most wise when he is most ignorant ; no matter whether he understands any thing of the disease ; there is one thing in which his visit must inevitably terminate—a prescription, which is a gentle hint for a fee ! This is the being whose occupation is insured by politic connections, and whose trade is visits : the vacant hurry of whose mind is discharged in common place questions and trivial directions, and who is reminded that he must think, or seem to think, only by recollecting that he must prescribe !”

The Medical Guide was first published in the year 1805 for the use of the clergy and heads of families, since which it has gone through seven heavy editions. It has been translated into different languages on the Continent, and reprinted in America.

Strongly convinced of the importance of a knowledge of medicine to the community, the author in the course of last year was induced to publish another work, more extended in its object than the present one, including in a popular view, the various subjects of *Anatomy*,

Chemistry, Dietetics, Pharmacy, &c. &c. In this circle of information every thing is comprehended that is necessary to render man better acquainted with himself, in what regards his form or structure, his constitution, and the different powers that act upon it. The reader desirous of enlarging his mind with a knowledge of the principal truths of anatomy, physiology, &c. &c. he flatters himself will be amply gratified. To the contemplative mind, the study of the wonderful mechanism of the human body, cannot fail to afford the most exquisite pleasure, and prove highly beneficial to society, by enabling the public to detect ignorance and guard against every species of quackery. This work, entitled "A PRACTICAL DICTIONARY OF DOMESTIC MEDICINE," is published chiefly for the use of the clergy, under the sanction of their Graces the Archbishops of Canterbury, York, and Dublin; the Bishops of Durham, Oxford, Winchester, Hereford, Ely, Rochester, Peterborough, Carlisle, Chester, Landaff, St. Asaph, St. David's, Clogher, and Ossory, &c.

In the year 1804, the author commenced the practice of Physic and Surgery, in the metropolis. He found the prescriptions he gave were often ineffectual, from being compounded of sophisticated medicines, or articles not of their genuine quality, by which he was deprived both of benefiting his patients, and doing that justice to his own reputation, to which from his exertions he conceived himself entitled. In opposition to professional prejudices and etiquette, he resolved therefore to form an establishment under his own direction, where both his patients and the public in general might be supplied with Drugs and Chemical Articles of approved qua-

lity, and medicines compounded with proper nicety and attention. This gave rise to the chemical and medical hall, and will explain the reason why as a physician he *descended* to the character of a chemist, which some of his contemporaries have been pleased to style him—being ignorant themselves of chemistry, the most important branch, if not the foundation of medicine, it may be policy in them to debase it.

This undertaking he considered equally a matter of duty as necessity in order to acquit himself in a proper manner of the engagements he owed to society; and the success which has attended the institution has exceeded his most sanguine hopes.—The establishment is now patronized by the first medical characters, who, superior to professional illiberality, have given it their warmest support, in consequence of finding the rectitude required in the preparation of medicines, and the honourable principles on which it is founded. It has likewise to boast of some of the first names in science who have given their fullest approbation to his views. The trading part of the profession have been thus foiled in their opposition directed against it. The high character it has gained, has made it the resort of those who wish for genuine and approved drugs; and the different plans of family medicine chests (described page 156), which he has adopted in forming an arrangement of medicines suited to the different situations of individuals and departments of society, have enabled the author to extend the Practice of Domestic Medicine to all ranks, and

to diffuse the blessings of medicine throughout the country at large, in a manner as complete as it is possible for those who are not professional characters to apply it. It is on these solid grounds he looks for public support, despising all professional finesse in dispensing this first of benefits to mankind, and conscious of the rectitude of his motives, it will form the pride of his life to improve and extend both the plan of the institution he has established, and the particular objects with which it is connected. Resting his reputation on the genuineness of every article sold at this institution, he begs the public will observe that it is an invariable rule to affix a label to every article, specifying its name, and that it was obtained of Reece, Burgess, and Co. Chemical and Medical Hall, 20, Bedford Street, Covent Garden, without which it is not to be depended on as coming from this institution.

To those who may be desirous of being further acquainted with the science and trade of medicine, and the impositions that are daily practised by regular and irregular quacks, he recommends the following valuable publications:

The MONTHLY COMPENDIUM of MEDICINE—This popular work is published on the First of every Month, price One Shilling. It records Medical Facts, and exposes the nefarious practice of Quacks, and half-educated Physicians and Fee-hunters, and the ignorance of the overflowing of medical practice in the service of booksellers for making certain periodical publications. Such a work will of course have many enemies, but will be supported by the true friend to science, and those that cultivate the healing art for the honour of

the profession, and good of mankind. The opposition it has experienced from interested men, and those regular Quacks who impose on the public under the plausible title of *regular Physicians*, and inexperienced garrettee-writers, cannot fail to recommend it to men of integrity and discernment.

Just published, price 3s. 6d. an EXPOSITION of the Present State of the PROFESSION and TRADE of MEDICINE, as practised by Physicians, Surgeons, Apothecaries, Chemists, Druggists, and Quacks, in Great Britain, &c. &c. by Jeremiah Jenkins, Esq. a late Member of the Faculty of Physic.

“This work not only merits the serious attention of the members of the British legislature, but every parent that regards the health and happiness of himself and offspring. The many impositions practised by regular men and quacks, here detailed, reflect indelible disgrace on the country.”—*Monthly Compendium of Medicine*. May, 1810.

In one volume, price 10s. 6d. in boards, a SELECTION of the most INTERESTING CASES that have occurred in the Practice of the most eminent Physicians, Surgeons, and Accoucheurs, in Great Britain, and on the Continent, with practical remarks; to which are added, Observations on the Progress of Medicine, to the year 1810. By a Society of Practical Physicians and Surgeons.

These works may be obtained of all Booksellers in the United Kingdom.

PART THE FIRST.

THE FAMILY DISPENSATORY.

FOR the basis of a Family Dispensatory, the author has selected those Medicines which he judges most essentially necessary to furnish the Medicine Chest, and with which, from their great utility, one person at least in every village* ought to be provided. The advantages of such a provision are too numerous to be detailed, and too obvious to be denied. It affords an immediate resource in

* Doctor Disney Alexander, in a "Dissertation on the Means of preserving Health," judiciously observes, "If clergymen who live in the country, and gentlemen who reside upon their own estates, would devote a small portion of their time to the study of medicine, it is incalculable how much good they might render to the poor families in their several neighbourhoods in this respect. The *timely* exhibition of a few doses of physic in the beginning of a disease, with a few plain directions concerning cleanliness, régime, &c. would be no degradation to their character, and might frequently prevent the spread of those infectious fevers to which the lower classes of people, even in country villages, are sometimes subject, and which, not unfrequently from neglect and inattention, prove fatal to the youngest, most robust, and most useful part of the community."—The tribute of applause is never more justly due, nor more honourably conferred, than when it is bestowed on those who exert their influence and employ their talents in lessening the sum of human misery; who sit by the side of affliction, promoting the recovery of health, and mitigating the anguish of disease.

those sudden attacks of disease, and contingencies of misfortune, in which it is absolutely necessary relief should be *speedy* to be *effectual*. In cases of fits, suffocation, poisons, burns, scalds, &c. every medical man must acknowledge the good it may do, and the evil it may prevent.

Charity thus bestowed, in alleviating the sickness of the indigent individual, is, of all others, the most useful and commendable. What satisfaction can, indeed, be equal to mitigating the sufferings, and still more, in often being able to save the lives of our fellow creatures? To a heart glowing with the true spirit of Christian charity, can any thing possibly be so gratifying as to restore the bloom of health to the wan and faded cheek of poverty and disease? Nor is it a point of less importance, that the Family Medicine Chest is supplied in London with drugs very superior in quality to those generally sold in the country*, on the purity of which the greatest reliance may be placed.

Besides, a family possessing a collection of such medicines as they are in the habit of using from a respectable source, are not exposed to those serious mistakes which so frequently happen in the country, through the ignorance or carelessness of young men employed in druggists', and

* Those who are best acquainted with the nefarious practices of the wholesale dealers in drugs, that supply the retailers in the country, will admit the justness of this remark. To such a disgraceful pitch is this traffic now carried, that articles in powder are sold at one third the price they are in substance. Imitations of drugs both in substance and powder are sold, which do not contain a grain of the article of which it bears the name. As the life of a patient may depend on the genuineness of a medicine, surely such practices merit the interference of the legislature.

apothecaries' shops, by selling arsenic, corrosive sublimate, &c. for articles resembling them in appearance.

Various plans for a Family Medicine Chest have been recommended by medical writers. The chest termed the *Family Dispensary* is so constructed, that its contents may be arranged to correspond with the numerical references of the first part of this work, and the bottles, &c. proportioned to the utility and potency of the articles they are intended to contain, viz.

Five Bottles in the Back Part for

- | | |
|----------------------------|------------------------|
| No. 1. Magnesia | No. 3. Castor Oil |
| 2. Rochelle Salt, or | 4. Tincture of Rhubarb |
| Epsom Salt, or | 5. Opodeldoc |
| The Tasteless Purging Salt | |

Five Bottles in the Front Part for

- | | |
|-------------------------------|-----------------------------|
| 6. Comp. Tinct. of Bark, or | 9. Comp. Spirit of Lavender |
| 7. Tinct. Ginger and Camomile | 10. Mindererus's Spirit |
| 8. Comp. Tinct. of Senna | 11. Paregoric Elixir |

Nine Bottles in the Right Wing for

- | | |
|----------------------------|-----------------------------------|
| 12. Spirit of Hartshorn | 17. Tincture of Myrrh |
| 13. Spirit of Sal Volatile | 18. Diluted Vitriolic Acid |
| 14. Vitriolic Æther | 19. Tincture of Asafoetida |
| 15. Sweet Spirit of Nitre | 20. Volatile Tinct. of Guaiac Gum |
| 16. Antimonial Wine | |

Nine Bottles in the Left Wing for

- | | |
|--------------------------------|-----------------------------|
| 21. Salt of Wormwood | 26. Rhubarb Powder |
| 22. Crystall. Acid of Lemon, | 27. Jalap Powder |
| 23. Ipecacuan Powder | 28. Refined Camphire |
| 24. Essential Salt of Bark, or | 29. Comp. Cretaceous Powder |
| 25. Salt of Steel | 30. Extract of Lead |

Nine small Bottles in a Drawer for

- | | |
|---------------------------|------------------------|
| 31. Liquid Laudanum | 36. Basilic Powder |
| 32. Essence of Peppermint | 37. Antimonial Powder |
| 33. Essence of Cinnamon | 38. Camph. Acetic Acid |
| 34. Prepared Calomel | 39. Smelling Salts |
| 35. Emetic Tartar | |

Six Pots in a Drawer for

40. Blistering Plaster	44. Savin Ointment
41. Spermaceti Ointment	45. Squill Pill
42. Brown Cerate	46. Comp. Colocynth Pill
43. Yellow Basilicon	47. Lenitive Electuary

Six Drawers in the Front, with Partitions, for

48. Peruvian Bark, or Rhatany Root Powder	54. Cream of Tartar
49. Jamaica Ginger Powder	55. Flowers of Sulphur
50. Senna Leaves	56. Court Plaster
51. Flaky Manna	57. Lint and Plaster Skins
52. Gum Arabic Powder	58. Diachylon
53. Purified Nitre ditto	59. Ditto with Gum
	60. Prepared Natron

Two large Drawers on the Front for

Pestle and Mortar	A Lavement Syringe with self Pipe
Graduated Ounce Measure	A Lavement Bag, with Pipe for Children.
Do.—Drop do.	A small Male and Female Syringe
Scales and Weights	A Probang
Spatula Bolus Knife	A Tourniquet.
A Pair of Scissars	
Silver Spoon	
Funnel and Tyle	

EXPLANATION OF WEIGHTS AND MEASURES.

20 Grains	make	1 Scruple	℞
3 Scruples		1 Drachm	ʒ
8 Drachms		1 Ounce	℥
12 Ounces		1 Pound, or Pint.	℔

The small round impressions on the thin weights stand for so many grains.

The graduated measure is marked from half a drachm to an ounce, and the drop measure from one to thirty drops.

The doses specified throughout this work are for adults, which must be increased or diminished according to the strength and habit of the patient, and the age, by the Rules specified in the Catalogue of Drugs, in the Appendix.

It is customary to repeat the dose of an aperient medicine about every four hours till it operates, or to employ a lavement, which, if the costiveness proves obstinate, and particularly

when attended with pain in the bowels, is preferable to a repetition of strong cathartic medicines.

By a tea-spoonful, is meant one drachm—a table-spoonful, half an ounce—a wine-glassful, two ounces—and a tea-cupful, three ounces, or a quarter of a pint. A drop is generally considered to weigh a grain, so that sixty drops are reckoned equal to a drachm, or tea-spoonful; but, in all cases, the smallest doses should be measured, as drops greatly differ both in size and weight. Spoons likewise vary too much in size to be used as measures for the exhibition of potent medicines.

The following characters are also in general use:

R̄ (Recipe) Take

a. aa or ana, of each

ss. the half—as ʒss. half an ounce

Cong: (Congius) a gallon

Cochl. (Cochleare) a spoonful.

It may not be superfluous to observe here that drugs are retailed in the quantities above a drachm by avoirdupois, or grocers weights, and from a drachm, lower, by the troy or apothecaries weight. In the compounding of medicines, the troy weight is, or at least should be always used. The avoirdupois or grocers weights differ very much from the troy or apothecaries, and in consequence of grocers dealing in drugs, mistakes are often made in the *quantity* of the article. The grocers pound contains sixteen ounces, and the ounce sixteen drachms. The pound also varies, for the grocers pound contains 7000 grains, and the apothecaries only 5760; hence the pound of the latter is less than that of the former by 1240 grains. But the apothecaries ounce, on the other hand, is greater than the grocers; the former containing 480 grains, and the latter $437\frac{1}{2}$ grains. The measure of liquids also differs, one being used for beer, and the other for wine. In medicine the latter is employed.

No. 1. MAGNESIA.

This very useful absorbent earth is procured from the Epsom salt.—It unites with the acid formed in the stomach in consequence of indigestion, and by neutralizing speedily it relieves the troublesome sensation improperly termed *heartburn*, which is occasioned by the action of the acid on the internal coat of the stomach. On uniting with the stomach acid, it forms an aperient medicine which operates gently and pleasantly on the bowels. It

is generally taken from fifteen to thirty grains, in a little peppermint water; or when that cannot be procured, with a grain or two of grated or powdered ginger.

The purgative effects of magnesia *entirely* depending on its meeting with an acidity, it frequently happens that a small dose will operate more on the bowels than a large one, through there not being a sufficient quantity of acid present to dissolve it; and if there be no acidity in the stomach or intestines, it will not produce any sensible effect: little reliance can therefore be depended on it as a purgative, in cases where acidity does not evidently prevail.

When acidity is the consequence of debility of the digestive organs, which in adults is generally the case, the salutary effects of magnesia will be but temporary, unless combined with an aromatic bitter, as the tincture of ginger and camomile, No. 7, or aromatic tincture of Rhatany root, which will present its recurrence by strengthening the organs of digestion. When the complaint is obstinate, or has been long standing, the prepared natron will prove more effectual, and, being perfectly soluble in water, is also more pleasant to take. (See Prepared Natron, No. 60, and Indigestion.)

For correcting acidity in the stomach of a child, when attended with *costiveness*, magnesia, either alone or combined with a little rhubarb powder, is certainly the best remedy we are acquainted with; but when attended with *looseness*, or what nurses term *gripping stools*, the compound cretaceous powder, No. 29, will prove not less efficacious in absorbing the acidity, and at the same time will restrain the violence of the purging; or, if the evacuations be not excessive lime water, will answer best with a mild aromatic, as the absorbent mixture No. 73—See Looseness of Children,

The *calcined* magnesia has been preferred by some practitioners on account of its not disengaging fixed air in the stomach and intestines, on uniting with an acid, which air from the *common* magnesia is extricated in considerable quantity. Fixed air is however so very grateful to the stomach as often to remove nausea, and so far from increasing flatulency in the intestines, will often correct and relieve it, the two gases being very different in their nature; but when the patient is much oppressed with air in the stomach, the calcined magnesia should be employed. (See Flatulency.)

Magnesia is frequently adulterated with chalk by unprincipled druggists; this fraud may be detected by putting a dessert-spoonful of the suspected magnesia into an ounce of the diluted vitriolic acid, No. 18. If the magnesia be *entirely* dissolved, and the solution remains *clear*, it may be pronounced pure, but not otherwise. If the experiment be made with the common magnesia, there will be a considerable effervescence; but, with the calcined, there should be none, if it be well burnt and kept properly secured from the air.

The new name for magnesia *not* calcined, is Carbonate of Magnesia (*Carbonas Magnesiae*), and the calcined is termed Magnesia.

No. 2. ROCHELLE SALT, EPSOM SALT, and TASTELESS PURGING SALT.

The *Rochelle salt* has been long esteemed by the first physicians on the continent, as less disagreeable than Glauber's or the Epsom salt, and through the commendation of the late Dr. Cullen, has been much employed in this country. It may be taken to the extent of an ounce,

or twelve drachms, dissolved in three or four ounces of water or cheese whey, the latter of which in some degree covers that brackish taste from which none of the aperient salts are entirely free.

The Epsom salt, although more unpleasant to the palate than the Rochelle, has the advantage of operating with equal efficacy, and in general with such ease and safety (rarely occasioning griping pains or sickness,) as to have induced many practitioners to suppose it possesses the power of allaying colicky pains, independently of its purgative effects. Six drachms of this salt are equal in strength to an ounce of the Rochelle. It may be taken, dissolved either in whey or common water—with the former, in the proportion of six drachms to a quarter of a pint; it is by no means an unpleasant potion.

The *phosphate of soda*, commonly called *tasteless purging salts*, was first introduced into the practice of medicine in this country by Dr. Pearson, as less nauseous than any of the aperient salts. In taste it is so similar to the common salt, that patients have taken it in broth and gruel without discovering the difference. As a purgative, it has no advantage over the Rochelle salt, and is less efficacious than the Epsom salt.—It is taken in the same dose as the Rochelle.

These aperient salts, but more particularly the Epsom salt, in the dose of one or two drachms once or twice a day, are very excellent alterative medicines, and dissolved in water, in the proportion of an ounce or six drachms to a quart, form a purgative water not inferior to that obtained from the native springs. The solution of an ounce of the Epsom salt in a quart of pure soft water, is equal if not superior in every respect, to that of the Cheltenham spa;

and for those cutaneous eruptions and leprous affections of the skin, commonly but improperly termed land-scurvy, and piles, habitual costiveness, indigestion, flatulency, and many constitutional and local affections, I have frequently found, it succeed after mercurial and other alteratives had failed. By the addition of two or three grains of salt of steel to the above solution, a *chalybeate aperient water* is formed, perhaps not less efficacious than the bath, or any chalybeate spa in these kingdoms; and has this very important advantage, that the quantity of steel and aperient salt may be adapted to the *nature* of the disease, or *constitution* of the patient. This artificial chalybeate water has proved highly serviceable in cases of green sickness, the whites, palsy, worms, indigestion, flatulency, &c. and for those stomach complaints affecting the lower class of people, it affords a very cheap and efficacious remedy. Should it, in such cases, prove too cold for the stomach, it may be taken warm, or with a little ginger powder or aromatic tincture. The quantity to be taken is from a wine glass to a tea cup full every or every other morning, according to its aperient effects on the bowels.

By dissolving half a drachm of liver of sulphur, and an ounce of Rochelle salt, in a quart of pure soft water, a *sulphureous aperient water* is made, not inferior to that of the sulphureous spa at Harrowgate; and taken to the extent of a wine-glassful once or twice a day, has proved very beneficial in chronic rheumatism, cutaneous affections and piles.

By these means the different saline chalybeate and sulphureous waters may be prepared, to any degree of strength, and no doubt, to possess the virtues of the natural springs; and being easily obtained without resorting to the watering-places, are more suited to those whose avoca-

tions or circumstances do not admit of their leaving their homes.

An aperient salt has been much advertised under the name of "Cheltenham salt," or Chalybeate Aperient, which is not made from the Cheltenham water, and certainly possesses no advantage whatever over the Glauber's salt, and in many respects is inferior to the solution of the Epsom salt, with the steel as already recommended.

The new name for the Rochelle salt is Tartarized Soda (*Soda Tartarizata*); for the Epsom salt, Sulphate of Magnesia (*Sulphus Magnesiæ*); and the tasteless purging salts, Phosphate of Soda (*Phosphus Sodæ*).

No. 3. CASTOR OIL.

This oil, expressed from the Castor Seeds, (*palma christi*) to the extent of an ounce, or twelve drachms, affords a valuable purgative medicine in cases of spasmodic colic, habitual costiveness, or piles. It may be taken conveniently with a little peppermint-water, (swallowed off as it floats on the top;) to which a table-spoonful of compound tincture of senna will prove an useful addition, by rendering it less nauseous to the taste and stomach, and at the same time quickening its operation. If this mode be objected to by the patient, an emulsion may be made by rubbing the castor oil with about the fourth part of the yolk of an egg, in a mortar, and when well blended, to add very *gradually* an ounce of peppermint-water, and lastly some sugar.

Castor oil has of late years been expressed in considerable quantity in England. The seeds being carefully freed from decayed ones, and from their rind, (both of which are very acrid,) and little heat being employed in

the process, the oil is rendered less nauseous than that prepared in the East and West Indies. It is however at best an unpleasant medicine, and as a *mild* purgative has been much over-rated.

The English expressed castor oil may be known by being transparent, and nearly as pale as pure water.

No. 4. TINCTURE OF RHUBARB.

This tincture (containing the medicinal virtues of Rhubarb and Cardamom seeds in proof spirit,) in the quantity of half an ounce to an ounce, diluted with an equal quantity of water, affords an excellent warm purgative draught, for colicky and flatulent affections of the bowels. In weakness and laxity of the stomach and intestines, and a sluggish state of the viscera (frequent causes of indigestion and flatulence); this tincture may be advantageously taken in conjunction with essential salt of bark, as directed for the stomachic mixture, No. 61; and when accompanied with heartburn or vomiting of acid matter, the prepared natron, No. 60, will prove an useful addition. On account of the stimulating nature of the spirit and cardamom seeds, it should not be *indiscriminately* administered in every case of pains in the bowels, or at least in such quantity as to operate as a purgative, but employed more as a warm stomachic medicine, in the quantity of two or three tea spoonfuls in a little mint water, to which a little rhubarb or jalap powder may be added when the bowels require to be emptied.

No. 5. OPODELDOC.

This liniment composed of soap, oil of rosemary, and rectified spirit, is a very useful external application for sprains, bruises, chilblains, and for dispersing inflammatory tumours;

but in cases of *indolent* tumours, *deep-seated* or rheumatic pains, paralytic numbness, and enlargement of joints, it will be adviseable to render it more stimulating by adding half an ounce of spirit of hartshorn to two ounces, as in such cases we cannot expect any benefit to arise unless a considerable irritation of the skin be produced. In such cases the volatile liniment, No. 103, is generally more successful.

Opodeldoc is generally applied by rubbing it over the part with the naked hand, or by means of flannel, and in most cases the friction is probably of as great importance as the liniment itself. This mode of applying it renders it improper when the part is inflamed, in which case either the diluted Mindererus's Spirit, No. 10, or the lotion directed under the head of Extract of Lead, No. 30, is preferable on account of their being applied by means of linen rags.

The new name for Opodeldoc is Soap Liniment (*Lini-mentum Saponis.*)

NO. 6. COMPOUND TINCTURE OF BARK.

This tincture, impregnated with the medicinal virtues of the Peruvian bark, snake root, and the Seville orange peel, first introduced in practice by Dr. Huxham, may be taken to the extent of a table-spoonful, diluted with double the quantity of pure water, three times a day, in cases of indigestion, and general languor of the system: to which the diluted vitriolic acid, No. 18, in the quantity twelve drops, will prove a valuable addition, if the patient be also affected with flatulency or profuse perspirations; but, when acidity prevails, the prepared natron, No 60, should be substituted for it. (See Tonic Mixture, No. 77.)

The essential salt of bark, dissolved in Sherry or Port wine, as directed, No. 24, forms a tincture, that possesses the virtues of the bark in an equal degree of perfection as the compound or simple tincture, and has at the same time the very important advantage of being exempt from the pernicious effects of the ardent spirit * with which they are made.

The Rhatany root, which is also the produce of Peru, is a more pleasant and powerful stomachic medicine than the Peruvian bark, the compound or aromatic tincture of which, is in many respects, (particularly as a remedy for indigestion and general debility,) very superior to the compound tincture of bark.

It may not altogether be improper to observe in this place, that before we employ *cordial* stomachic medicines, with the view to strengthen the system, it will be necessary to consider well, whether the debility is in consequence of any mischief going on in any part of the system, as the liver, the stomach, the lungs, &c. which the *cordial* effects of the medicine would aggravate.—When cordial medicines are employed, it will always be proper to attend to the state of the bowels, as they very apt to occasion costiveness. The new name for this tincture is Compound Tincture of Cinchona (*Tinctura Cinchonæ Composita.*)

No. 7. TINCTURE of GINGER & CAMOMILE.

This tincture strongly impregnated with the aromatic virtues of the Jamaica ginger root, and the essential oil and

* Many persons, no doubt, have to date their first propensity to dram drinking to the too frequent use of spirituous tinctures, rashly prescribed for hysterical complaints, lowness of spirits, flatulency, &c.

bitter quality of the camomile flower, affords a most valuable stomachic medicine; and in cases of indigestion, flatulency, laxity of the bowels, dropsy, and complaints arising from debility of the digestive organs, it has often succeeded after the Peruvian bark had failed.

From thirty to forty drops of this tincture may be taken two or three times a day, in half a wine-glass of water. In gouty habits and obstinate cases of indigestion, arising from the too free use of spirituous liquors, or old age, the dose may be increased to a tea-spoonful and upwards.

When indigestion is attended with much nausea and acidity an emetic should precede the use of this and other stomachic medicines, and, if attended with costiveness, this tincture may be more advantageously taken in the solution of Epsom salt, as recommended under the head of Epsom salt, No. 2; but for nervous irritability and hypochondriacal affections, rosemary, sage, or valerian tea will afford the best vehicle.

When indigestion or weakness of the system is attended with looseness or an irritable state of the bowels, the aromatic tincture of the Rhatany root is preferable to this tincture.

No. 8. COMPOUND TINCTURE OF SENNA.

This tincture, containing the medicinal properties of senna leaves, jalap, and coriander seeds, is a pleasant, warm, and aperient medicine, and in the quantity of a small wine glassful, taken alone, or diluted with water, generally affords relief in colicky and flatulent complaints of the bowels; and generally succeeds better than tincture of rhubarb, or any other warm purgative cordial.

A common tincture of senna, sweetened and coloured with treacle, is sold under the name of *Daffy's Elixir*.

No. 9. COMPOUND SPIRIT OF LAVENDER.

This tincture being impregnated with the medicinal virtues of lavender, and rosemary flowers, nutmeg, and cinnamon, was first introduced into the practice of medicine under the name of *Palsy Drops*. It is both a pleasant and efficacious cordial, and in the dose of forty to eighty drops on a piece of sugar, or in a glass of water, or wine, is deservedly much employed in cases of languor, weakness of the nerves, decay of age, lowness of spirits, and fainting fits. See Nervous Mixture, No. 72.

In the practice of medicine, it is chiefly employed to cover the ill flavour of nauseous drugs, and to colour mixtures.

No. 10. MINDERERUS's SPIRIT.

This saline medicine, made by neutralizing distilled vinegar with the volatile salt of ammonia, taken to the extent of half an ounce, two or three times a day, in a glass of mint tea, produces a salutary determination to the skin, allays fever, and abates thirst. In inflammatory fevers, and acute rheumatism, or in cases where the object of practice is to quiet the system, and promote perspiration, (which after much corporeal exertion is highly beneficial,) this is unquestionably a very valuable medicine, and more safe than the Dover's powder, which, on failing to excite perspiration, never fails to increase the febrile symptoms.

In cases where the immediate operation of a sudorific

medicine is of importance, it would not be proper to trust to Mindererus's Spirit alone, but employ it with the view of keeping up the effects of a more active medicine, as the antimonial febrifuge powder, No. 37.

In acute rheumatism, twenty drops of antimonial wine, No. 16, and ten of laudanum, No. 31, as recommended by Dr. Blane, may be added to the night dose of Mindererus's spirit with advantage ; or if any objection be made to laudanum, three table-spoonfuls of camphorated julep may be employed in lieu of it and the mint tea. (See Sudorific Mixture, No. 63.)

The new name for this medicine is Solution of Acetate of Ammonia (*Liquor Ammoniae Acetatis.*)

No. 11. PAREGORIC ELIXIR.

This elixir is a solution of opium, camphor, flowers of benzoin, and oil of anniseeds in proof spirit. Taken in the dose of a tea-spoonful in a glass of water, two or three times a day, it powerfully allays that tickling sensation in the windpipe, which provokes frequent coughing. In spasmodic asthma, and *chronic* difficulty of breathing, taken, (as frequently prescribed by the late Dr. Hugh Smith,) with the oxymel of squills, it gives very considerable relief, by facilitating the expectoration of viscid phlegm; and allaying irritation of the lungs. (See Asthmatic Mixture, No. 68.)

If the person be of a full habit of body, disposed to inflammatory attacks, or the cough preceded or attended with rigours, head-ach, fever, or be evidently the effect of cold, paregoric elixir is not a safe remedy ; and if it does not promote perspiration, (an effect we are not to expect

from it) it will assuredly be the means of producing much mischief, although it may succeed in allaying the cough. Pleurisy and consumption of the lungs, too frequently follow the injudicious exhibition of this medicine. In coughs of a doubtful nature, it will therefore always be advisable to give paregoric elixir with a medicine that will occasion a determination to the skin, as Mindererus's Spirit, or two grains of Ipecacuan powder.

Half an ounce of this elixir contains a grain of opium.

The new name forth is elixir is, Compound Tincture of Camphor (*Tinct. Camphoræ Comp.*)

No. 12. SPIRIT OF HARTSHORN.

This volatile liquor, taken from twenty to thirty drops in a glass of water, often affords immediate relief in cases of lowness of spirits, fainting, and hysteric fits. It may likewise, in such cases, be rubbed on the temples, and applied to the nostrils. The same quantity of the compound spirit of lavender will render it more grateful to the palate, and acceptable to the stomach, and, at the same time, promote its cordial powers.

Equal parts of spirit of hartshorn and olive oil, form an excellent stimulating *external* application for paralytic numbness, chronic rheumatism, diseased joints, and inflammatory sore throat. (See Volatile Liniment, No. 103.)

The spirit of hartshorn is frequently mixed with the water of ammonia, by unprincipled druggists, to increase its pungency, and to enable it to bear an addition of water. This fraud is detected by adding highly rectified spirit of wine to the suspected spirit; if no considerable coagulation ensue, the adulteration is proved. True spirit of hartshorn will likewise not effervesce with an acid.

The new name for Spirit of Hartshorn is, Volatile Liquor of Hartshorn (*Liquor Volatilis Cornu Cervi*).

No. 13. SP. SAL VOLATILE.

This volatile aromatic spirit is taken in the same manner, and for the same purposes as the spirit of hartshorn. It is more pleasant to the palate, and a more powerful stimulant than spirit of hartshorn, on account of its being impregnated with the essential oil of cloves and lemon peel. A tea-spoonful of this spirit, with the same quantity of compound spirit of lavender, taken in a tea-cupful of horse-radish and mustard-seed tea three times a day form an efficacious medicine in gouty affections of the stomach, paralytic numbness of the extremities, and flatulent complaints of long standing. (See Stimulating Mixture, No. 74.)

It will likewise prove a valuable addition to the tincture of the essential salt of bark, made with Sherry or Port wine, as directed, No. 24, in debility of the stomach and nervous system. (See Nervous Mixture, No. 72.)

The new name for this spirit is Aromatic Spirit of Ammonia (*Spiritus Ammoniae Aromaticus*).

No. 14. VITRIOLIC ÆTHER.

This ætherial spirit, in the quantity of a tea-spoonful in a glass of peppermint or pure water, often affords immediate relief in spasmodic colic, cramp of the stomach, and asthmatic, hysterical, and fainting fits. A small dessert spoonful in a wine-glass of camphorated julep, Dr. Lind and other practitioners assert to be an admirable remedy, when the gout attacks the stomach. It often gives ease in the most violent head-ach, by being applied externally

to the part, and relieves the tooth-ach, by being laid on the afflicted tooth and jaw by means of lint. It must be observed, that in its external use it is capable of producing two very *opposite* effects, according to the *mode* of application; for if its evaporation be prevented by covering the place to which it is applied with the hand, it will so powerfully stimulate the skin, as to excite a sensation of heat and great redness. On the contrary, if the part of the body to which it is applied be *exposed* to the air, its rapid evaporation will produce an intense degree of cold, and in this manner it has proved more beneficial in *acute* pains, particularly when attended with great heat.

Æther should be always taken in a *cold* vehicle, and swallowed as quickly as possible; and the bottle in which it is kept should be well corked, and kept in a cold place, inverted in water to prevent its escape.—(See Antispasmodic Mixture, No. 70.)

The once celebrated anodyne liquor of Hoffman, and Clutton's febrifuge spirit, are a weak æther.

Good æther should not redden the colour of litmus, or produce a precipitation with a solution of barytes.

The new name of Æther is Sulphuric Æther (*Æther Sulphuricus*).

No. 15. SWEET SPIRIT OF NITRE.

This ætherial preparation of nitre, in the dose of twenty to thirty drops in a little water, allays fever, quenches thirst, promotes the natural secretions, moderately strengthens the stomach, and is said to resist putrefaction; hence it becomes a valuable medicine in fevers, both inflammatory and putrid. It may be given with a small dessert spoonful of the Mindererus spirit, No. 10, every

three or four hours. It is also an useful remedy for strangury, or stoppage of urine, or when the kidneys do not perform their office, and for gravel, in which cases it may be administered from thirty to forty drops, three times a day, in either the almond emulsion, decoction of marshmallow-root, or linseed tea. A tea-spoonful of a mixture of equal parts of sweet spirit of nitre and spirit of sal volatile, taken twice a day, in two table spoonfuls of water, or, if the patient be much debilitated, in a mixture of the Rhatany root, (see Rhatany Root,) will increase the secretion of urine in dropsical complaints, and at the same time strengthen the constitution.

Sweet spirit of nitre, if properly made, will not effervesce with an alkali, or give a blue colour to tincture of guaiacum. By age or exposure to the air, it is so far decomposed as to possess very opposite properties; it should therefore be kept in the same manner as directed for æther.

The new name for Sweet Spirit of Nitre is Spirit of Nitric Æther (*Spiritus Ætheris Nitrici*).

NO. 16. TARTARISED ANTIMONY WINE.

This solution of emetic tartar in white wine is more certain in its operation than the common antimonial wine, the strength of which cannot be depended on, however carefully prepared; it should therefore be always preferred. In inflammatory affections of the chest, and recent coughs from obstructed perspiration, administered in a mucilaginous vehicle, as directed for the cough mixture, No. 66, it relieves respiration, promotes expectoration, and abates fever, by producing a determination to the skin, and quieting the circulation.

For the purpose of exciting full vomiting, it should be given to the extent of a dessert spoonful; which, by also operating on the bowels, and producing perspiration, will often check the progress of inflammatory fever, especially when administered on its commencement.

In sciatica, and inflammatory rheumatism, antimonial wine, in the dose of thirty drops, with fifteen of laudanum, No. 31, in a glass of mint water, taken every night at bedtime, was a very favourite remedy with the late Dr. Fothergill, and certainly deserves the high commendation given it by that esteemed author.

Like all other antimonial preparations, it must be regarded an active remedy, and should not be *indiscriminately* prescribed in *all* fevers; for although it has, under proper management, been productive of much good, in fevers *strictly inflammatory*, it has, on the other hand, as frequently done irreparable mischief, from being administered in low fevers, and *putrid* ulcerated sore throats, by occasioning such great evacuations as to hurry the patients to their graves in a short time. In domestic medicine it should not therefore be employed in fevers of an *ambiguous* nature, without the sanction of an experienced medical practitioner. In fevers of a doubtful nature it will be more advisable to employ ipecacuan powder, which will answer equally well as an emetic, without reducing the strength of the patient; and for the purpose of keeping up perspiration, and quieting febrile action, Mindererus's spirit, with sweet spirit of nitre and camphorated julep, will answer as well as the antimonial preparations in exciting perspiration, and may be employed with safety and effect in those autumnal inflammatory

fevers, which frequently, and often suddenly, exhibit symptoms of great debility,

In obstinate eruptions of the skin, tartarised antimony wine, in small doses of eight or ten drops three times a day, in a tea-cupful of the decoction of the inner bark of the elm tree*, is a good alterative medicine, and often succeeds in obstinate leprous affections or scorbutic eruptions, after other alterative medicines had proved ineffectual.

The new name for this wine is Solution of Tartarised Antimony (*Liquor Antimonii Tartarizata*).

No. 17. TINCTURE OF MYRRH.

This solution of gum myrrh in proof spirit is chiefly employed as a lotion for the teeth and gums; and in those constitutional caries, or decays of the teeth, which commence with black specks, or superficial holes in the enamel, it may check their progress, but it can have little or no effect in removing tartareous encrustations. But when the gums are spongy and tender, this tincture from its stimulating quality is very improper. In such cases an astringent application, as the simple tincture of rhatany root, by constringing the vessels will prove very beneficial. (See Levigated Charcoal.)

Myrrh has been much esteemed as a *warm* strengthener of the stomach and bowels, and as such is said to have proved serviceable in languid cases, and particularly those female disorders that proceed from languor or debility of

* This decoction is made by boiling an ounce of the *inner* rind of the elm bark in a pint and a half of water, to a pint,

the system. A tea-spoonful of the tincture may be taken twice a day, in a glass of cold camomile tea, or, as recommended by Dr. Lind, with half a drachm of Peruvian bark powder, in a glass of peppermint water : but the best method of administering myrrh in cases of green sickness, is in the form of pills, combined with steel, gentian, and aloes, as the cephratic pill of the Edinburgh Pharmacopœia, ten grains of which, divided into two pills, may be taken twice a day. (See Green Sickness.)

Both tincture of myrrh, and the compound tincture of Benzoin, commonly called Friar's Balsam, it should be remembered, are improper applications for recent cuts ; as the stimulating gums of which they are made excite a degree of inflammation which prevents the union of the sides of the wound, and thus occasions ulceration. (See Cuts and Bruises.)

In cases of *putrid* sore throat and the thrush, tincture of myrrh, with the diluted vitriolic acid, and an infusion of roses, form an excellent detergent gargle. (See Detergent Gargle, No. 95.)

No. 18. DILUTED VITRIOLIC ACID.

This medicine in the dose of ten to fifteen drops twice a day, in a wine glass of water *, is a valuable medicine in weakness and relaxation of the stomach, and decay of constitution, particularly when occasioned by the abuse of spirituous liquors, and will often succeed after the Peruvian bark and other tonic medicines have been exhibited without effect. It is likewise an excellent remedy for

* In elderly people, or when the stomach is much oppressed with air, an infusion of ginger is the best vehicle.

restraining the profuse nocturnal perspirations attendant on hectic fevers, and relaxed habits.

In cases of indigestion this medicine is supposed to prove beneficial, by preventing fermentation of vegetable matter, and the consequent formation of an acid and disengagement of air. (See Indigestion.)

The diluted vitriolic acid has also been much extolled as a remedy for vomiting.—In those cases the supercarbonated Kali is the best medicine. (See Salt of Wormwood.)

For redundancy of bile in the stomach or intestines, this medicine will chemically prove more serviceable than calomel, or the drastic purges commonly employed for its evacuation, and will, at the same time, tend to remove the cause, by strengthening the digestive organs, which the frequent use of strong purgative medicines will ultimately impair. (See Bilious Affections.)

The diluted vitriolic acid, with an infusion of rose leaves, makes an excellent gargle for inflammation of the throat, and relaxation of the soft palate. (See Acidulated Gargle, No. 93.)

This acid has the property of covering the bitter taste of the Peruvian bark and other drugs. The quantity of fifteen drops to a pint of the solution of Epsom salt, recommended No. 2. renders it more agreeable to the palate, and more efficacious as an alterative medicine in diseases of the skin.

It does not differ in its medicinal virtues from the acid elixir of vitriol.

The new name for the diluted vitriolic acid, is diluted Sulphuric Acid (*Acidum Sulphuricum Dilutum*).

No. 19. TINCTURE OF ASAFŒTIDA.

This strong solution of Asafœtida Gum in proof spirit, is, in the quantity of thirty to fifty drops, in a glass of pennyroyal or peppermint water, much and successfully employed as a remedy for lowness of spirits, hysteric, (see Antihysteric Mixture No. 65,) and fainting fits; different nervous complaints, spasmodic colic, (see Antispasmodic Mixture, No. 70,) and asthma (see Asthmatic Mixture, No. 68). The addition of ten drops of sal volatile to each dose will render it more pleasant to the palate, and at the same time coincide with its virtues.

A mixture of one third of tincture of asafœtida, and two of paregoric elixir, taken in the dose of a tea-spoonful, has been found particularly serviceable in relieving asthma, and chronic difficulty of breathing, by expelling air from the stomach, promoting expectoration, and allaying irritation. (See Asthma.) In the hooping cough, when unattended with fever, it will prove equally beneficial, in doses proportioned to the age of the patient, viz. to a child of two years old, six drops, increasing two drops for every year. Both Dr. Cullen and Dr. Miller speak highly of the expectorant properties of asafœtida in spasmodic asthma, difficulty of breathing, and hooping-cough. (See Hooping-cough.)

No. 20. VOLATILE TINCTURE OF GUAIAIC GUM.

This solution of the guaiac gum in the compound spirit of ammonia, in the quantity of one to two tea-spoonfuls, is a popular and very efficacious remedy for *chronic* rheumatism, gout of the stomach, and partial paralytic numbnesses.

It may be taken with the camphorated julep, in the proportion as recommended for the anti-rheumatic mixture, (No. 71,) or in case of being attended with debility of the system, with the bark mixture, (See No. 24.) The part affected with rheumatism or palsy should also be well rubbed with volatile liniment, or stimulated with electric sparks, and kept warm by means of flannel. When rheumatism is attended with fever, this tincture in consequence of its stimulating quality, is not proper, and if it should not in such case promote perspiration, it will aggravate the complaint, by increasing the feverish state of the system.

The last new name for this tincture is Ammoniated Tincture of Guaiac Gum. (*Tinct. Guaiac. Ammon.*)

NO. 21. SALT OF WORMWOOD.

This alkaline salt is chiefly used for making the saline mixture with the juice of the lemon. (See No. 78.) It is sometimes prescribed alone in doses of six or ten grains, dissolved in mint water, for correcting acidity in the stomach, and for increasing the secretion of urine. It is the basis of the alkaline mephitic water, which is made by dissolving two ounces and a half in five quarts of distilled water, and afterwards saturating it with fixed air, by Nooth's or Parker's apparatus. This water, to the extent of half a pint two or three times a day, is much recommended by many eminent surgeons as a remedy for stone in the bladder and gravel, and is, no doubt, more deserving a fair trial than any remedy hitherto suggested. If in this quantity it should prove too cold, or produce unpleasant distention of the stomach, two tea-spoonfuls of the spirit of juniper, commonly called Hollands, or a

little brandy, may be taken with it: or if it should nauseate the stomach, a tea-spoonful of paregoric elixir may be taken with it, or a quarter of an hour before it. The aerated soda water being pleasanter to the palate, and in calculous complaints probably more efficacious, is now more generally employed. (See Prepared Natron, No. 60.)

A solution of salt of wormwood in peppermint water, in the proportion of two drachms of the former to two ounces of the latter, was much recommended by Dr. Rosentein as a remedy for rickets, in the dose of twenty or twenty-five drops twice a day to a child of four years old to eight, in a little milk or whey. In the same manner it has been exceedingly beneficial in convulsive fits of infants, as appears by several late communications by practitioners of celebrity in the *Monthly Medical and Surgical Spectator*: its salutary effects in such cases are probably produced by correcting acidity, which is often not only the cause of convulsions but also many of the most obstinate complaints of children. (See Rickets.)

Salt of wormwood is rendered more pleasant to the palate, and in many respects improved as a medicine, by being saturated with fixed air. This preparation is preferred for making the saline draughts, when they are directed to be taken in a state of effervescence, and for making the mephitic alkaline water. It has also been found to succeed in the quantity of five grains, dissolved in an ounce of peppermint water, taken every two hours, in allaying vomiting, after other medicines had failed.

Salt of wormwood is a powerful agent in counteracting the fatal effects of mineral poisons taken into the stomach, (See Treatment of Mineral Poisons.)

The alkaline salt procured from wormwood, differing in no respect from that of other vegetables, the term salt of wormwood is no longer employed by professional men. The last new name is Subcarbonate of Potash (*Subcarbonas Potassæ*); and for the salt, saturated with fixed air, Carbonate of Potash (*Potassæ Carbonas*).

No. 22. CRYSTALLIZED ACID OF LEMON.

This preparation affords a good substitute for the juice of the lemon when it cannot be obtained fresh, which often happens in long voyages and journies. A drachm of this acid is equivalent to an ounce and a half of the recent juice. Equal quantities of the crystallized acid of lemon and salt of wormwood, about a drachm of each, dissolved in half a pint of water, with six drops of essence of peppermint, and a little sugar, readily make the saline mixture, so much employed in inflammatory fevers. Where the skin is parched with great febrile heat, this mixture generally operates as a gentle sudorific, cools the body, allays thirst, increases the secretion of urine, and operates slightly on the bowels; but to produce these effects, it should be given in a much greater quantity than is usually prescribed; indeed it is better calculated as a beverage than a medicine; for such is its weakness, that unless it be taken to the extent of nearly a quart in the space of twenty-four hours, it cannot be expected to produce any salutary effect of consequence. The saline mixture, both in putrid and inflammatory fevers, succeeds better when given in the act of effervescence, which is done by dissolving a scruple of salt of wormwood in an ounce of mint-water, and mixing with it, at the moment of taking, a table-spoonful of lemon juice, sweetened with sugar, or a scruple of the chrystal-

lized acid of lemon, previously dissolved in an ounce of common water; the effervescence with the lemon juice, being more gradual, answers in this case much better than the salt, the fixed air in the latter being disengaged too suddenly for a sufficient portion to be swallowed, through being deprived of its mucilage in the process of crystallization; but when the recent juice cannot be readily procured, this inconvenience may be obviated, by dissolving in the acid a little white sugar; or the effervescence may be made to take place in the stomach, by first taking the solution of the salt of wormwood, and afterwards the lemon juice, or solution of the crystallized acid, in the above proportions; in either way a much less quantity is necessary than of the saline mixture. The effervescence with the salt of wormwood, saturated with fixed air (carbonate of potash), being considerably greater than with common salt of wormwood, it should, in all cases of fever, be preferred.

The saline draught, in a state of effervescence, is a good preventive medicine against the infection of contagious fevers, and may be employed as an auxiliary to the nitrous fumigation. (See the Means of destroying Contagious Effluvia). The last new name for this preparation of lemon juice, is, Citric Acid (*Acidum Citricum*).

No. 23. IPECACUAN POWDER.

This powder is a very safe, and in general an efficacious emetic, and possesses the advantage of operating as an aperient medicine, without distressing the patient, when it fails properly to excite vomiting. It is, therefore, deservedly employed in almost every disease, in which full vomiting is required. For this purpose it is given from

one scruple to twenty-five grains, mixed with a little water, or, as advised by Sir John Pringle, Stoll, Zinnerman, &c. with the emetic tartar, in the proportion of the emetic powder, No. 88.

In the small dose of one or three grains, ipecacuan powder furnishes an useful, active, and, at the same time, innocent sweating medicine* as any we possess, (See Sudorific Mixture, No. 63,) and proves highly serviceable, combined with a quarter of a grain of opium, or five drops of laudanum, every two or three hours, in dysentery, obstinate purgings, habitual asthmatic indisposition, and whooping-cough. The emetic dose of twenty-five grains, with a tea-spoonful of tincture of asafœtida taken in a little peppermint water, at bed time, has proved very beneficial in shortening and sometimes preventing the paroxysm of spasmodic asthma.

Ipecacuan powder, in the quantity of three grains twice a day, in a little peppermint water, has been found very efficacious in spitting of blood and excessive flooding, by Dr. Stoll; of Vienna; and ample experience in this country has proved it to be a safe and efficacious remedy in these cases; for when it has provoked vomiting, the complaints have rather been relieved than aggravated by it. In the smaller dose of one or two grains every four hours, it produces a considerable determination to the skin, and

* The celebrated sweating powder of Dr. Dover is composed of one part of ipecacuan powder, one of opium powder, and eight of vitriolated kali, commonly called sal polychrest. From ten to twenty grains may be taken in any convenient vehicle in rheumatic affections. The patient should lie between the blankets or in a flannel shirt, and take, as soon as he begins to perspire, some warm liquid, in small portions, frequently; such as thin gruel, bohea tea, or weak white wine whey.

promotes expectoration: hence it is a most valuable medicine in pleurisy, inflammatory affections of the lungs, recent coughs from obstructed perspiration, and the first stages of pulmonary consumption. (See Cough Mixture, No. 66.)

It has likewise the property of diminishing the soporific effects of opium or any of the vegetable poisons, and hence is recommended as a powerful auxiliary to the emetic tartar, (See Emetic Powder, No. 83,) for the purpose of exciting vomiting when too great a quantity of those poisons has been taken into the stomach. (See Treatment of poisons.)

No. 24. ESSENTIAL SALT OF BARK.

This preparation contains, in a concentrated state, the volatile and active properties of the Peruvian bark, in a high degree of perfection, and answers every purpose of the powder, without producing the ill effects of nausea, vomiting, and purging, so much to be dreaded in diseases of debility, such as putrid sore throat, mortifications, and agues; cases in which no other preparation of this valuable medicine affords a proper substitute for the powder.

Ten grains of the essential salt are equal to a drachm of the bark in substance. It is much more pleasant to the palate, and agrees better with the stomach, and may, with equal advantage, be employed where the use of a strengthening medicine is indicated. In intermittent and remittent fevers, ten grains may be taken every two hours, either in the form of pills, or dissolved in an ounce of camphorated julep, as recommended for the camphorated bark mixture, No. 67; but for low fevers, putrid sore

throat, and mortifications, red Port wine is a better vehicle; with which, in the proportion of three drachms to a quart, it makes an elegant tincture, possessing all the active properties of the Peruvian bark, and at the same time free from the pernicious effects of the ardent spirit of wine, with which the different simple and compound tinctures are made.

This valuable preparation of the Peruvian bark was first made in France, by the Count de Garraye, and prescribed in this country by Dr. James Carmichael Smyth, who, from repeated trials, now gives it a decided preference. Apothecaries in the country, unacquainted with the preparation, and some, perhaps from sordid motives, have, in compounding prescriptions, substituted for it the common extract, which is a different article, and does not contain the resinous and volatile parts of the bark.

No. 25. SALT OF STEEL.

This preparation of iron has been long held in high estimation as a great strengthener of the stomach and bowels, and, at the same time, by increasing the red globules of the blood, affords a valuable remedy for drop-sical complaints, green sickness, and other diseases of debility, attended with poverty of blood.

From its poisonous effects on white blooded animals, it proves a very powerful and safe vermifuge, taken in the dose of five grains, (dissolved in a glass of water,) when the stomach is most empty.

Iron has lately been recommended by Mr. Carmichael, an eminent surgeon in Dublin, as a remedy for cancer: who has lately published several cases in which it effected a cure. This ingenious author, supposing that iron is

held in solution in the blood by the *phosphoric* acid, recommends the saline preparations of it to be made with it, in order that it may sooner, and in greater quantity, enter the circulation. The preparations he has found most successful, are, the oxy-phosphate, the sub-oxy-phosphate, and phosphate of iron.

The principle on which these preparations are supposed to act, and the methods of using them, are detailed in the Second Part of this work, under the head of the Treatment of Cancer.

The salt of steel readily dissolves in water, and in the proportion of a grain to a pint, affords a good substitute for the natural chalybeate waters. (See Epsom Salt, No. 2.) Thirty grains dissolved in a quart of sherry wine, make a very excellent chalybeate wine, of which a small wine-glassful may be taken two or three times a day.

In cases of green sickness and irregularity of the menstrual evacuation, it has been found to answer best when combined with aloes, a form for which, is given among the remedies recommended for green sickness.

In cases of dropsy, whites, and gleet, the extract of rhatany root will prove a very powerful auxiliary in the following proportions:

Take of salt of steel, ten grains; extract of rhatany root one drachm; socotrine aloes, twenty grains; oil of caraway-seeds, ten drops; with simple syrup, make into twenty pills, two to be taken twice a day.

When the countenance is florid, and the patient of a plethoric habit, steel is improper even in cases of suppression or retention of the menses.

The last new name for Salt of Steel, is Sulphate of Iron (*Ferri Sulphas*).

No. 26. RHUBARB POWDER.

Rhubarb has long been held in high estimation as a mild and efficacious aperient^r medicine; and on account of its operating with less violence or irritation than any other aperient medicine, is generally employed with pregnant women and children. Besides its purgative quality, it is celebrated for an astringency, which strengthens the tone of the stomach and intestines, and hence proves useful in disorders arising from laxity of the fibres, particularly when attended with a sluggish state of the bowels. The purgative dose is from one to two scruples in a little peppermint water, to which ten grains of calcined magnesia may be added, as prescribed by Dr. Hartmann, when acidity prevails in the stomach. A powder composed of six parts of rhubarb, one of calomel, and a little ginger powder, is an efficacious remedy for worms, and a good purge for dropsical and bilious complaints, or when the bowels are loaded with slime. Half a drachm of this compound powder may be taken for a dose, and for the purpose of suspending the calomel, it should be taken in a thick vehicle, as honey or jelly, or made into pills with a little syrup, as the Bilious Pills, No. 83.

A mixture of fifteen grains of rhubarb, a scruple of calcined magnesia, a drachm of white syrup of poppies, two drachms of compound tincture of cardamom, and two ounces of dill water, in the dose of a tea-spoonful, will prove very beneficial in removing many disorders children are subject to, from a redundancy of acidity in the stomach and intestines, and more safe and efficacious than the advertised carminatives, which, by occasioning costiveness, not unfrequently produce considerable mischief. (See Absorbent Mixture, 73.)

Rhubarb is not only rendered more aperient by a small addition of sal polychrest, but its secondary constipating effects are in some degree obviated by it. Dr. Hugh Smyth and Dr. Warren were very partial to this latter combination, as a stomachic medicine, in the small dose of five grains of rhubarb, and six grains of sal polychrest, in peppermint water, about twice a day. In larger doses it is very apt to occasion griping pains.

In diseases attended with extreme debility of the system, where it is necessary to relieve the bowels, rhubarb, on account of its possessing a tonic power, may be administered with safety and effect, when no other medicine could with safety be employed.

The Russian rhubarb is evidently very superior to that imported from the East Indies, both as a stomachic and aperient; it is sold under the name of Turkey Rhubarb.

No. 27. JALAP POWDER,

In the dose of twenty to twenty-five grains, with two of ginger; or twenty grains mixed with two drachms of compound tincture of senna, and an ounce of mint water, is a very pleasant, safe, and effectual purgative medicine; and generally performs its office without occasioning nausea or much griping. In cases of dropsy of the extremities or belly, four grains of calomel, to fifteen or twenty grains of jalap, with two or three drops of essence of peppermint, will prove very beneficial both as a purgative and diuretic. For those complaints, this medicine should be repeated three times a week, and the tonic mixture, No. 77, taken in the intermediate times.

For delicate constitutions, half the dose of jalap powder, and as much powder of rhubarb, with three drops of essence of mint, are preferable to jalap alone.

The operation of jalap and rhubarb may be promoted by taking after them a weak solution of the neutral purgative salts. (See No. 2.)

It is a curious fact, that in hypochondriacal patients, jalap manifests little or no effect as a cathartic, but occasions severe griping, and on the bowels of quadrupeds it is said to produce no sensible effect whatever.

No. 28. CAMPHOR.

This peculiar concrete gum is very generally employed in fevers, both of the inflammatory and malignant kind; in spasmodic affections, morbid irritability of the nervous system, and often in fluxes.

The common and best method of exhibiting camphor, is by suspending it in water with gum arabic and sugar, as the

Camphorated Julep,

Which is made in the following manner:

Take of camphor, twenty grains; spirit of wine, twenty drops; white sugar and gum arabic, of each two drachms. Rub the camphor first with the spirit of wine, then with the sugar, and, when reduced to a fine powder, add the gum arabic powder, and when well mixed, pour on them, very gradually, a pint of boiling water (continuing the rubbing till the whole of the water is poured on;) then cover it over, and when cold, strain it through fine linen for use.

A mixture of six ounces of this julep, and two ounces of Mindererus's spirit, taken in the dose of three table-spoonfuls every three or four hours, is a safe and good sudorific medicine in inflammatory and febrile affections. In fevers, strictly inflammatory, it may be given with the tartarised antimony wine, No. 16. In putrid fever, malignant sore throat, and mortifications, it affords a very

excellent vehicle for the exhibition of Peruvian bark. (See Essential Salt of Bark, No. 24. and Mixture, No. 67.) In strangury, three table-spoonfuls of a mixture of camphorated julep, and half a drachm of purified nitre, and two drachms of gum arabic, repeated every three hours, will prove of great service.

In *chronic* rheumatism, and *paralytic affections*, camphor, combined with the guaiac gum, affords an excellent remedy in the proportion recommended for the Anti-rheumatic Mixture, No. 71.

In cases of increased irritability of the nervous system, a mixture of camphor, castor, sp. sal volatile, &c. may be taken with great advantage. (See Nervous Mixture, No. 72.)

In cases of hooping-cough, chronic difficulty of breathing, and asthma, a mixture of camphorated julep with oxymel of squills, asafoetida, and æther, (as advised for the Asthmatic Mixture, No. 68.) was much recommended by the celebrated Dr. Hartmann, and is certainly a valuable composition for those complaints.

It is worthy of remark, that in *acute* fever, attended either with a determination of blood to the head or lungs, camphor is a very doubtful remedy, and when it fails in those cases to excite perspiration, it generally increases the fever.

In maniacal cases, and the delirium attendant on low fever, camphorated julep, in the dose of three table-spoonfuls, has often succeeded in procuring sleep after laudanum had failed: in the same manner, repeated every four hours, it proves serviceable in *eruptive* fevers, and frequently produces the return of receded small-pox or measles.

One drachm of camphor, dissolved in two ounces of rectified spirit of wine, with two drachms of spirit of turpentine, form an excellent stimulating liniment for rheumatic pains and paralytic numbness.

No. 29. COMPOUND CRETACEOUS POWDER.

This powder, composed of prepared chalk, cinnamon, and gum arabic powder, is a very useful medicine for correcting acidity, and strengthening the stomach and bowels, and hence has been found particularly serviceable in restraining looseness arising from acidity or laxity of the bowels. Twenty grains may be taken in a glass of water, with three drops of the essence of cinnamon, or in a mixture, as the Cretaceous Mixture, No. 64.

When looseness is evidently the consequence of acrid humours in the stomach and intestines, an emetic of ipecacuan, No. 23, or a dose of rhubarb, No. 26, should precede the use of astringent medicines.

When purging occurs spontaneously in fever, it should never be too suddenly checked. Even in low putrid fever it is often of a critical nature, and highly beneficial to the patient. In such cases its effects must be attentively watched, and no astringent medicine of this kind administered, unless clearly indicated by the reduced state of the patient. (See Diarrhœa.)

This cretaceous powder, for correcting acidity in the stomach, answers as well as magnesia. It, however, differs essentially in its effect on the bowels after uniting with an acid; the magnesia acting as a purge, while the cretaceous powder renders the body costive; hence when acidity is attended with costiveness, magnesia should be preferred, and when with a contrary state of bowels, the

cretaceous mixture. In some cases they may be advantageously combined. (See Magnesia.) The cretaceous powder is very similar to gascoign balls, the salutary effects of which depend on their absorbent property. When purging is not excessive, and the object is to moderate and not to restrain it entirely, lime-water is preferable to this powder. (See Lime Water.) The new name for this powder, is Compound Powder of Chalk (*Pulv. Cretæ Comp.*)

No. 30. EXTRACT OF LEAD.

This solution of lead in vinegar makes a good discutient or cooling lotion, in the proportion of ten drops to half a pint of pure water, with half a drachm of laudanum, for inflammations of the eyes; but for bruises, slight burns, scalds, excoriations, and inflammations in other parts of the body, treble the quantity of the extract may be employed, and three drachms of rectified spirit of wine, or three ounces of white wine vinegar, substituted for the laudanum.

This extract is *solely* used externally, and as colicky and paralytic affections have been known to arise from a portion of the lead being taken up into the system, by the absorbent vessels of the skin, when the inflammation or injury is *extensive*, it will be more advisable to substitute a lotion, composed of equal parts of white wine vinegar and water. This lotion, in such cases, will generally answer all the good purposes of the extract of lead, without producing any of its ill effects, and therefore, in *domestic* practice, should be preferred. The good effects of lotions, no doubt, in a great measure, arise from their being applied *cold*, and as lead certainly diminishes arterial action, a slight impregnation of it must in cases of active inflam-

mation prove highly beneficial. When there is a tendency to gangrene, on the same principle, it is very improper.

The late Sir George Baker published twelve cases of infants who died at Dartmouth of convulsions, occasioned by an ointment made of Goulard's extract, applied to the nipples of their mothers. This ointment under a plausible name was sold by a woman famous for her skill in the treatment of sore nipples; and it is to be feared those accidents frequently occur from the use of the advertised nipple ointments, the basis of which I have ascertained to be lead*. For the means of counteracting the effects of lead taken into the stomach, see Treatment of Mineral Poisons.

The last new name for extract of lead is Solution of acetate of Lead (*Liquor Plumbi Acetatis*).

No. 31. LIQUID LAUDANUM.

Of this solution of opium, in proof spirit, from twelve to thirty drops may be taken in any convenient vehicle, and increased or diminished in proportion to the *degree* of pain and *intervals* of its repetition. When judiciously administered, opium, no doubt, is the most valuable medicine in the *Materia Medica*; and in certain stages, and

* A child having died rather suddenly of convulsions, in January, 1803, and understanding the mother had applied an ointment recommended by the nurse to the nipples, I was induced to examine the ointment, and question the nurse respecting it. She declared it was *perfectly innocent*, that it did not contain a particle of lead, but that it was made of lytharge of gold, vinegar, and spermaceti ointment, which form the most poisonous preparations of lead that can be made, and which I have no doubt proved fatal to the child. The dusting of children with white lead, generally termed ceruse powder, is also a dangerous practice, and is no doubt often the cause of convulsive fits and pains in the bowels.

with certain combinations, is, more or less, employed in almost every disease incident to the human frame. It has the wonderful properties of mitigating pain, inducing sleep, allaying inordinate action, and diminishing morbid irritability; hence it becomes an invaluable remedy in obviating symptomatic fevers attendant on fractures and other accidents. In spasmodic colic, it will often prevent inflammation of the bowels; and, in all spasmodic affections, it is more or less employed. In incurable and painful diseases, as in cancer, diseased joints, &c. it alleviates the sufferings of the patient, and renders life more tolerable.

If the quantity of eight or ten drops of liquid laudanum, (which in domestic medicine should always be begun with,) do not answer, it must be repeated and increased till the desired effect is obtained; and in this manner the dose of this drug may in general be pushed with safety to a very great length: but this advice should only be followed in cases of *accidents* and *chronic* diseases, where there is considerable *local* irritation to overcome. When it disagrees in the ordinary quantity, it may often be given with much advantage in doses of five drops every hour till the desired effect be produced. When the exhibition of laudanum is deemed necessary by way of lavement, in cases of obstinate purging, pain in the bladder or womb, spasms in the bowels, &c. the proportion should be about double the quantity given by the mouth.

In the violent purgings and fever, so often attendant on the difficult dentition of children, laudanum, in the dose of one or two drops about twice a day, will prove very serviceable, by allaying the irritability of the system; and as children are more or less affected at such times with

acidity in the stomach, it would always be advisable to administer it with a little magnesia, as the Absorbent Mixture, No. 73; but where the bowels are disturbed, lime water, in the quantity of a dessert spoonful, is the best vehicle; on the contrary, if the child be of a costive habit, or be disposed to rickets, enlarged bowels, &c. the body should be kept open by the occasional exhibition of rhubarb powder, with calomel, as recommended under the head of Rhubarb Powder, No. 26.

To counteract the effects of too large a dose of laudanum, coffee has been much recommended as a diluter, and ipecacuan powder as an emetic; and when the quantity taken is so great as to render vomiting necessary, the ipecacuan should be administered to the extent of two scruples, with half an ounce of tartarised antimony wine. The vegetable acids are likewise much recommended as powerful correctors of its narcotic effect, and will prove an useful auxiliary to the emetic. Lemon juice, and vinegar, for this purpose, are equally efficacious in the quantity of half a wine-glassful. (See the Treatment of Vegetable Poisons.)

An acetic tincture of opium, sold under the name of *Black Drop*, has been preferred by some practitioners to the liquid laudanum, on account of its not affecting the head or stomach, or producing that nervous irritability, which too frequently follows the exhibition of laudanum. The acetic acid with which this tincture is made, so corrects the opium, that patients have certainly been able to persevere in its use with the most happy effects, who could not take opium in any other form.

For slight inflammation of the eyes, two drops of laudanum, dropped within the eyelids twice a day, will often

succeed in dispersing the inflammation much sooner than the saturnine lotions. Some practitioners prefer a watery solution of opium for this purpose; but the small quantity of spirit in the laudanum is more serviceable than otherwise. The watery solution is however less painful. The new name for laudanum, is Tincture of Opium (*Tinctura Opii*).

No. 32. ESSENCE OF PEPPERMINT.

The oil of peppermint being mixed with rectified spirit of wine as in this preparation, by means of a little white sugar, more readily mixes with water, and, in the proportion of thirty drops to a pint, makes a pleasanter and better simple water than that distilled from the recent herb; which, from not retaining its flavour in perfection long, is seldom to be procured fresh. The spirituous peppermint-water may be made, by employing brandy in lieu of water, which will prove less pernicious to the organs of digestion than that sold under the name of peppermint cordial, which is made with spirit of wine. Essence of peppermint is chiefly employed to correct the griping quality of purgative medicines, and to render nauseous ones more palatable. The essence is, sometimes, taken alone on sugar, or in a little brandy or water, in cases of flatulence, colicky pains or spasms in the stomach or intestines, and fits of spasmodic asthma, in which it generally affords speedy relief.

No. 33. ESSENCE OF CINNAMON.

This essence, made by mixing the oil of cinnamon with spirit of wine, is recommended for making the spirituous and simple cinnamon-water, in the same manner as the

foregoing article, to which more sugar is usually added. Water thus impregnated with the essential oil of cinnamon, is chiefly employed as a vehicle for administering the absorbent medicines in cases of looseness. See Cretaceous Mixture, No. 64. The cinnamon-water, not possessing the astringency of cinnamon, has no advantage over peppermint-water, and is here introduced as a proper substitute for the latter when the flavor of it is unpleasant to the patient.

No. 34. PREPARED CALOMEL.

This is one of the mildest preparation of mercury. In domestic practice it is principally employed as a worm medicine, and is unquestionably the most efficacious remedy that can be administered for the destruction of every species of worms lodged in the alimentary canal. Its vermifuge power is increased by the addition of scammony, as the basilic powder, No. 36. For those complaints of the stomach and bowels, which are generally attributed to a redundancy of bile, but in fact arise from a deficiency of that secretion, in consequence of an indolent state of the liver, three or four grains may be taken once or twice a week with ten grains of rhubarb, and three of Jamaica ginger powder in the form of pills, with great advantage. (See Bilious Affections and Indigestion.)

In those cutaneous affections, generally termed scorbutic, and chronic inflammation of the edges of the eyelids, half a grain of calomel, taken twice a day, with six drops of the antimonial wine, No. 16, will prove a good alterative medicine; a dose of rhubarb should be occasionally inter-vened, to prevent such a quantity entering the constitution as might produce salivation, and its use discontinued

as soon as it has manifested any effect on the gums, or glands of the throat.

In diseases of children, as rickets and convulsions, which frequently arise from an accumulation of slime in the intestines, and obstructions of the mesenteric glands, this medicine, given in doses proportioned to the age of the child, with a little magnesia, will often be attended with the most salutary effects. Dr. Denman, Dr. Clarke, and Dr. Highton, often prescribe it in the dose of six grains for a child of two years old; and experience has proved that children bear the operation of a large dose as well as an adult; but in domestic medicine, it would not be prudent to exceed two grains for a child of one year old, and to encrease only one grain for every year to the age of five. On account of its being too heavy to be suspended in a thin liquid, it should always be administered in a thick vehicle, as honey, currant jelly, &c.

Calomel, although neither diuretic or sudorific, never fails to increase the operation of such medicines when given in conjunction with them; hence it is very common to prescribe it, with the antimonial powder, in fevers attended with *great dryness* of the skin, to excite perspiration, and with turpentine and squill-powder, to increase the secretion of urine.

Of all the mineral productions used in the practice of medicine, mercury is by far the most valuable; it is the only antidote against the venereal poison with which we are acquainted, and before this most important discovery was made, the havock produced by that disease was truly dreadful.

In obstructions and chronic inflammation of the viscera, particularly the liver, calomel, judiciously administered, has a very salutary effect: for this purpose it should be

given in the small dose of one grain (formed into a pill, with conserve of roses) twice a day, so that it may enter the system: if it should disturb the bowels, half a grain of opium, or five grains of the opiate confection, should be added to each dose. Much vegetables, and particularly acids, should be avoided during the course of mercurial medicines.

It frequently happens in cases of affection of the liver or stomach, or some local disease, where it is necessary the mercury should enter the system, that the patient through irritability of the stomach or bowels, cannot properly persist in its internal use, even in the smallest dose. In such case mercury may be introduced into the habit by the skin, in the form of an ointment. For this purpose the hydro-sublminated calomel will answer best. The quantity of three drachms of this preparation, well mixed with an ounce of fresh lard, makes an excellent white mercurial ointment, the size of a small nutmeg of which may be rubbed on the inside of the thigh, leg, or forearm, every night till it nearly disappears. The operation of the friction should be performed by the patient if possible, as the hand of an assistant would rob him of nearly half of it. This method of introducing mercury into the system, I have found to answer better in diseases of the liver, stomach, and glandular obstructions, than the exhibition of it by the mouth. By it the patient's stomach is not disordered, which is a great consideration, when the local disease is attended with considerable prostration of strength.

Calomel is sometimes adulterated with prepared chalk, which may be discovered by pouring on a small quantity of the suspected calomel a little diluted vitriolic acid; if an effervescence ensue, the adulteration is proved. The

last new name for calomel is Submuriate of Mereury. (*Submurias Hydrargyri*).

No. 35. EMETIC TARTAR.

Is so powerful a preparation of antimony, that the small quantity of one to three grains, dissolved in warm water, will produce full vomiting. It is generally given with ipecacuan powder, as the Emetic Powder, No. 88. On the first attack of hooping cough, small-pox, measles, inflammatory fevers, foulness of the stomach, and diseases of the lungs, (as asthma and dyspnœa,) it generally proves more successful than ipecacuan powder, but in fevers attended with great prostration of strength or looseness, ipecacuan, as operating less on the bowels, should be preferred.

As patients are differently affected by emetic tartar, the safest method of exhibiting it is by dissolving three grains in two ounces of warm water, and giving two table-spoonfuls of the clear solution every half hour, till it vomits. For children, emetic tartar is not so safe an emetic as ipecacuan powder; for when great debility of the system is present, even a small dose has been known to produce distressing effects. In domestic medicine, the preference should, therefore, be given to ipecacuan powder, in the treatment of the diseases of infants.

To excite vomiting after a large dose of a *vegetable* poison, emetic tartar, in the dose of four grains, dissolved in a little water, will often answer better than ipecacuan, on account of its operating *more speedily*; but in cases of *mineral* poisons, ipecacuan, in the doses of two scruples to a drachm is to be preferred, as the alkaline medicines administered to decompose the mineral poison, would

have the same effect on the emetic tartar, and thus render it inert. (See Treatment of Poisons.)

The observations on the use of antimonial wine (see No. 16) are equally applicable to emetic tartar, of which the tartarised antimony wine is only a solution in white wine.

The last new name for emetic tartar, is Tartarised Antimony (*Antimonium Tartarizatum*).

No. 36. BASILIC POWDER.

This powder, principally composed of calomel and scammony, is a medicine of great ancient repute, as a remedy for *every species* of worms lodged in the alimentary canal, and is, without doubt, the most powerful and safe vermifuge we are acquainted with. It may be given to children of all ages, in a little honey or currant jelly, every second or third morning for a fortnight, in the doses of three grains to a child of one year old, increasing one grain for every year, to the age of twenty. The tonic mixture, No. 77, should be taken in the intermediate times, and continued for some time after the evacuation of the worms. It is also a very excellent alterative purge for children, to empty the bowels of slime and crudities, and at the same time is a good security against worms and their effects, which so frequently produce the most alarming disorders that assail children. It is likewise a very good purgative medicine for children after the measles and other eruptive fevers that require the use of aperient medicines, and for rickety children with enlarged bowels.

The basilic powder, in the dose of twenty or thirty grains, is also a valuable purgative medicine in dropsical cases, in which it will answer much better than large

doses of creain of tartar, or any other cathartic, when a considerable discharge is required from the system. (See Pills, No. 80, and Dropsy.)

A very convenient method of administering this powder to children is in small cakes, made with gingerbread. For this purpose a drachm of the powder may be well mixed with a little gingerbread paste, and afterwards divided into three equal parts, and baked. Each nut containing twenty grains of basilic powder, may be divided in doses with sufficient accuracy, according to the age of the patient.

Since the publication of the first edition of this work, the author has had the satisfaction to receive accounts of the happy effects of the basilic powder in diseases of children, particularly worms, from the first families in the united kingdom.

No. 37. ANTIMONIAL FEBRIFUGE POWDER.

This medicine has long been sold under the name of "*Dr. James's Fever Powders.*" The best method of administering it is in the form of pills, by making a drachm into twelve pills, with a little conserve of roses or hips, one of which may be given every four or five hours, till it excites perspiration, in inflammatory fevers, rheumatism, and recent coughs. Dr. Monro very judiciously cautions practitioners against its *indiscriminate* use in every species of fever. "I have known," says the learned doctor, "several instances where it has been given in *putrid* ulcerated sore throats and in *low* fevers, and it has brought on such a purging as to hurry the patients to their graves in a short time."

In cases of pleurisy, recent cough, *acute* rheumatism, and fevers strictly inflammatory, it is, no doubt, a safe and very efficacious remedy for producing perspiration and

quieting the circulation, and more certain in its effects in exciting perspiration than any other sudorific medicine. It must be remembered, that in gaol or pestilential fevers, and putrid sore throat, it may be productive of much mischief, by reducing the strength of the system, and thus accelerate dissolution; for the low or putrid fever, in spite of all our efforts, will often run its course, and in such case the recovery of the patient will depend chiefly, if not entirely, on the natural strength of the constitution. The observations made on the indiscriminate use of antimonial preparations, under the head of Tarterised Antimony Wine, equally apply to this medicine.

No. 38. CAMPHORATED ACETIC ACID.

The acetic acid has a great and rapid action on contagious effluvia. Its vapours or exhalations correct the state of the atmosphere, with which it mixes, and, from being respired, in some degree rouse the vital powers of the system, so as to enable it the better to resist infection; for this purpose it will prove more efficacious than the once celebrated Thieves' vinegar; and for fumigating *small* rooms or wards, will answer as well as the nitrous or muriatic vapours recommended by Dr. Carmichael Smyth, and Mr. Cruickshanks, and, on the Continent, by Citizen Morveau, as noticed in the Appendix.

It is generally used by smelling a sponge moistened with it in a wide-mouth bottle or gold case; but to purify the air of an infected room, it should be diffused through its atmosphere by evaporating it on a saucer previously made warm, or by holding the saucer with it over the blaze of a candle.

For the purpose of smelling, in cases of head-ach, or in the contaminated air of gaols, hospitals, crowded rooms, &c. this acid is preferable to the volatile smelling salt, which has no effect in *destroying* putrid effluvia, and which by *much* use considerably injures the sense of smell, and may, in head-achs arising from a determination of blood to the brain, be productive of serious consequences; while the acetic acid, from its astringency, may be of service. (See Smelling Salts, No. 39).

This acid, impregnated with the essential oil of cloves, has been sold under the title of *Aromatic Spirit of Vinegar*. By this addition its antiseptic powers are not increased, but the oil, by becoming rancid, renders it unfit for keeping in warm climates, and, in a great measure, destroys its volatility.

No. 39. VOLATILE SMELLING SALT.

From the great pungency of this salt, it should not be used on *all* occasions, and particularly for head-achs attended with *fever* or *plenitude* of the vessels of the brain; besides, such powerful stimulants, by *frequent* use, so injure the olfactory nerves, as often to destroy the sense of smell. It should therefore only be employed in cases of fainting and hysteric fits; and on the appearance of returning life, in cases of drowning, hanging, &c. (See Suspended Animation). The camphorated acetic acid, for the purpose of smelling in crowded rooms, or for slight head-ach, is far preferable.

The new name for this salt is, Carbonate of Ammonia.

No. 40. BLISTERING PLASTER.

This plaster, composed of Spanish flies, wax, &c. is employed as its title implies, for the purpose of inflaming the

skin, or producing a blister. In spreading it, great care should be taken, that the spatula is only sufficiently warm to soften it, for by much heat, the acrid properties of the flies, in which its blistering powers solely reside, will be destroyed. The best method of spreading it, is first to warm it at a little distance from a fire, till it be sufficiently soft to spread with a knife.

When the *speedy* operation of a blister is required, the skin of the part on which it is to be applied, should be slightly inflamed by rubbing it with an onion, or the acetic acid. A little camphor scraped over the surface of the blister will often prevent the very unpleasant effect of strangury.

Both the discharge and the inflammation produced by blisters are very beneficial in cases of internal or deep-seated inflammation, rheumatism, apoplexy, palsy, and almost all affections of the brain, and diseases of the joints.

The new name for this plaster is, Plaster of Blistering Flies (*Emplastum Lyttæ*).

No. 41. SPERMACETI OINTMENT.

This ointment, composed of spermaceti, white wax, and olive oil, is an useful dressing for the purpose of healing blisters, but when the discharge is deemed necessary, the savin ointment, No. 44, should be used. It is likewise serviceable for softening the skin, and healing chaps. This ointment, coloured with alkanet root, is sold for lip salve.

The new Latin name for this ointment is, *Unguentum Cetacei*.

No. 42. BROWN CERATE.

This cerate, made of bees wax, olive oil, and prepared calamine, was first recommended by Dr. Turner, and has

therefore been usually distinguished by the name of Turner's Cerate. It is a good application for superficial ulcerations and excoriations, and for healing blisters; but for *recent* cuts, diachylon plaster, spread on leather, will answer best by keeping the edges of the wound in contact. It must be remembered, that the first object in the healing of ulcers, is to abate the surrounding inflammation by rest, and an emollient poultice of linseed meal and water, which will likewise produce a discharge of healthy matter, that will prove more healing than all the boasted cerates. An ulcer, in an healing state, is neither painful nor the discharge offensive; and, therefore, if a wound be painful, or the discharge offensive, it cannot be going on well. It must also be observed, that without rest and the proper application of rollers, no ointment will succeed in the healing of ill-conditioned ulcers.

The new name for this cerate is, Calamine Cerate (*Ceratum Calaminæ*).

No. 43. YELLOW BASILICON.

This ointment, composed of yellow resin, bees wax, and oil, is an excellent application for digesting foul ulcers; it should be spread *thinly* on lint, and applied the same size as the wound, and kept on by an external dressing of brown cerate and a calico or flannel roller. It is not a proper application for *recent* cuts, burns, or scalds: brown cerate, in such cases, should be employed.

The new name for this cerate is, Resin Cerate (*Ceratum Resinæ*).

No. 44. SAVIN OINTMENT.

This ointment, made by gently boiling bruised Savin in fresh hog's lard, is employed for the purpose of making

what is termed the perpetual blister, after the application of the blistering plaster. In consequence of its keeping up the discharge of blisters without producing the irritation and pain excited by the ointment made of Spanish flies or the repetition of a blistering plaster, it is now generally employed for that purpose; but in cases of palsy and *chronic* rheumatism, where the irritation of a blister is more required than the discharge, the Spanish fly ointment is preferable.

No. 45. SQUILL PILL.

This composition of squills, gum ammoniac, Spanish soap, and ginger, taken from ten to fifteen grains twice a day, is a powerful medicine in promoting expectoration, and increasing the secretion of urine; hence it is a valuable remedy in cases of *chronic* coughs and asthmatic affections attended with *viscid* phlegm, and in dropsical complaints.

The squill pill, combined with calomel, is an efficacious and valuable remedy for dropsy, either of the chest, belly, or extremities, in the proportions recommended for Dropsy, No. 80.

No. 46. COMPOUND COLOCYNTH PILL.

This pill, chiefly composed of bitter apple, aloes, scammony, and oil of cloves, is well known under the name of Pill Coccia. In the dose of fifteen grains it is a very useful and active purgative medicine, and in cases of *obstinate* costiveness, and when a *speedy* evacuation of the intestines is required, it will answer better than any other of the kind. It likewise affords an excellent purgative medicine for head-ach, arising from a determination of blood to the brain, and especially if the consequence of a suppression

of the piles, which it will often succeed in restoring; but in cases of piles being present, the milder purgatives, as the aperient salts, No. 2, or aperient mixture, No. 62, will answer best.

No. 47. LENITIVE ELECTUARY.

This composition of senna, cassia and tamarind pulp, figs, &c. has been long and very deservedly esteemed as a convenient and gentle laxative medicine, for habitual costiveness, piles, &c. It may be taken to the extent of a teaspoonful occasionally. (See Electuary for the Piles, No. 85.)

The new name for this electuary is, Confection of Senna (*Confectio Sennæ*).

No. 48. PERUVIAN BARK.

There are three species of this bark made use of in Britain, viz. the pale, the red, and the yellow, which are promiscuously administered, from a scruple to a drachm, every hour, in fevers of the intermittent class, commonly called agues, with equal advantage. Some practitioners recommend the red, when it can be obtained genuine; but, through the great difficulty in procuring the true sort, the pale has latterly had the preference. If the full dose disagree with the stomach and bowels, so as to produce vomiting or looseness, three or four drops of laudanum should be given with every or every other dose, and two or three grains of Jamaica ginger, or five of cinnamon powder, if it oppress the stomach. (See Tonic Powder, No. 91.) The powder may be taken either in camphorated julep, or peppermint water; or, in order to cover its ill taste, to which some people have an almost invincible antipathy, in an infusion of liquorice root, as advised by Dr.

Lewis; or in milk, which I have found, with Dr. Lind, to answer best. It should be swallowed immediately after it is mixed, otherwise the flavour of the bark will be imparted to the milk.

When the bark, in powder, cannot be made to stay on the stomach, the essential salt of bark, No. 24, affords a very proper substitute, and may be employed with equal advantage. During the hot fit of an intermittent, it may be given mixed with two table-spoonfuls of Mindererus's spirit.

In urgent cases of intermittent fever, Dr. Cullen and Dr. Lind advise the bark in powder to be given in the dose of a drachm and a half to two drachms every hour. The stomach, however, in this respect is the best guide, and as much as it will bear, may in general be given with propriety; for as Torti and other celebrated writers have inculcated, the *larger* the dose and the *quicker* the repetitions of it, the greater is the power of the medicine in stopping the paroxysms of ague, and the less of it is found to be taken in the end; whereas it has been observed, that when given in small doses and at long intervals, the sum of the whole quantity taken has been much more considerable, yet it has not produced the desired effect.

If the paroxysms should continue after the patient has properly persevered in the use of the bark three days, some visceral obstruction or unfavourable state of the stomach may be suspected; in such case therefore it will be adviseable to cleanse the first passages by an emetic and a purge of jalap and calomel, when recourse may be had to the bark again with success.

The Peruvian bark, as a strengthening medicine, has been more generally prescribed than any other of the class

of tonics. In mortifications, *putrid* sore-throat, and *malignant* fevers, it is generally exhibited from twenty to forty grains, every two or three hours, in a glass of port wine, or camphorated julep. In a great variety of diseases, as St. Vitus's dance, scrophula or king's evil, rickets, nervous irritability, indigestion, hysteric fits, and dropsy, it is likewise administered with great advantage with such combinations as predominant symptoms may indicate. Dr. Lind observes, that when the bark is entirely nauseated from a weakness of the stomach, or from an aversion of the patient to the taste of the medicine, it will be proper to administer it glysterways, in the quantity of two or three drachms in half a pint of beef tea every three hours, in which form it often proves as efficacious as when taken by the mouth.

In cough, asthma, consumption of the lungs, and difficulty of breathing, the bark should not be employed unless sanctioned by an experienced physician.

The decoction of bark is made by boiling one ounce of bruised bark in a pint and a half of distilled water, in a close covered vessel, for ten minutes. The liquor should be strained, while hot, through a coarse strainer, and used while turbid, for if suffered to stand till clear, the most efficacious part of the bark (the resin,) will subside. An infusion, both in boiling and cold water, has been recommended in preference to the decoction, on the supposition that the volatile and most active parts escape by boiling; but if a close vessel be employed this objection is removed.

The rhatany root is, in many respects, a better tonic medicine than the Peruvian bark, and in the cure of intermittents, and treatment of diseases that require the use of

a strengthening medicine, it has proved more successful. It is also less disagreeable to the palate. (See Ague).

The Peruvian bark is termed a *febrifuge* medicine.— We are not however by it to understand that it is proper in all fevers. Indeed it is only in the intermittent class, where there is a complete intermission, that it has been administered with evident advantage, and even when those cases are attended with much visceral obstruction or local plethora it will prove injurious. (See Ague). In inflammatory fevers, or fevers attended with local inflammation, it is decidedly very improper, and even in mortifications attended with a quick pulse, or feverish state of the system, it is inadmissible. When we say, likewise, that it is more or less employed in cases of scrophula, rickets, St. Vitus's dance, &c. it is to be understood, that the system is free from fever, and the stomach and bowels in a proper state for its exhibition. Indeed it may be said, that notwithstanding this medicine has been so much extolled for its tonic powers, that it has proved chiefly serviceable in cases of convalescency after acute disease; when no doubt, by invigorating the stomach, it will hasten the recovery of the patient. In cases of debility induced by local diseases, as ulcers with great discharge, &c. it is also a good strengthening medicine.

The new name for Peruvian Bark, is *Cinchona* (*Cortex Cinchonæ*).

No. 49. JAMAICA GINGER,

Has lately been introduced into domestic medicine, as a remedy for gout, indigestion, and flatulence, in the dose of twenty grains to a tea-spoonful in any common vehicle; and where the use of a warm stomachic is required, it is

no doubt a valuable medicine. Ginger, finely powdered, taken in tea or milk, warms and invigorates the stomach, without heating the body or increasing the circulation; hence it has proved serviceable in shortening a fit of the gout, and its continued use has in many instances prevented its recurrence, probably by keeping up an healthy digestion, and counteracting the debilitating and other injurious effects of the too free use of vinous or spirituous liquors. Ginger, although pungent to the taste, allays the irritation of piles, and often speedily removes them; and has succeeded in many distressing affections of the rectum or great gut, arising from chronic inflammation, by producing a secretion of mucus from its internal surface. In cases of indigestion, its effects are more permanent when combined with a bitter, as the Tincture of Ginger and Camomile, No. 7.

No. 50. SENNA LEAVES.

In domestic medicine senna leaves have been long employed as a purgative for children. It is customary to disguise its flavour by infusing two drachms, with a little bohea tea, in a quarter of a pint of boiling water, and adding, when poured off clear, a little brown sugar and milk. The ill taste of the senna may thus be so far covered, that children will not know it; a few coriander or caraway seeds may also be added, to correct its griping quality. Senna is not so efficacious a purge for children as the basilic powder, which has likewise the great advantage of removing slime and destroying worms.

To adults, senna is generally given in conjunction with other purgative medicines, as the Aperient Mixture, No. 62.

No. 51. MANNA.

Is chiefly used as an ingredient in making a purgative mixture, the recipe for which is given under the head of *Aperient Mixture*, No. 62.

Manna being very subject to generate acidity and air in the bowels, is by no means so good a purgative medicine for infants, as rhubarb combined with magnesia or the basilic powder.

No. 52. GUM ARABIC.

A solution of this gum in the proportion of two ounces, in a pint of common or barley water, taken to the extent of a tea-cupful, furnishes a very excellent lubricating beverage, in cases of inflammation of the kidneys, or bladder, bloody urine, (arising from gravel or other causes); and when the natural mucus of the intestines is abraded, as in cases of dysentery and violent looseness. With the addition of nitre, it will prove very serviceable in strangury, and heat of urine, (See *Diuretic Powder*, No. 89.) As a pectoral drink in cases of pleurisy, gum arabic, (in the proportion of two or three drachms to a pint,) is a valuable addition to the compound barley water, directions for making of which are given in the Appendix.

The new name for this Gum is *Acacia Gum* (*Gum. Acaciæ*).

No. 53. PURIFIED NITRE.

This salt possesses a cooling quality, and in the dose of six or ten grains, dissolved in water, Mindererus's spirit, or camphorated julep, quenches thirst, abates febrile heat,

and quiets the circulation. It is likewise very efficacious in strangury. (See Gum Arabic, No. 52.) In pleurisy and inflammation of the lungs, it is, as Dr. Cullen observes, a very doubtful remedy; and although it may succeed in abating the constitutional fever, it has certainly been found to aggravate the local mischief, and to provoke cough.

A solution of nitre in water, in the proportion of half a drachm to half a pint, is a good gargle for dispersing inflammation of the throat and mouth; but the gradual solution of a few grains on the tongue, and swallowed with the saliva, generally answers in such cases much better. (See Discutient Gargle, No. 92.)

The new name for Nitre or Salt Petre, is Nitrate of Potash (*Nitras Potassæ*).

No. 54. CREAM OF TARTAR,

Being a mild and cooling aperient, is deservedly much employed as an alterative medicine for children, in inflammatory eruptions of the skin, and in impurities of the blood and juices, to which it is customary to add an equal quantity of sulphur.

The most convenient and pleasant method of giving cream of tartar and sulphur to children, is in the form of an electuary, (made with a sufficient quantity of honey) of which a tea-spoonful may be given every morning with a draught of sassafras tea; if it should not operate sufficiently on the bowels, half a drachm of jalap powder may be added to an electuary of an ounce of flowers of sulphur, and the same quantity of cream of tartar.

Cream of tartar is much recommended by professor Home, as an active and efficacious purge in dropsical

complaints I have not known it to succeed so well in such cases as the basiliac powder, which produces copious discharges from the system, without occasioning the debility which commonly follows large doses of cream of tartar.

The acid beverage so much used in hot climates under the name of *Imperial Drink*, to cool the body and quench thirst, is made with cream of tartar in the following manner:—

Take of cream of tartar three drachms, and the rind of one lemon; pour on them (in an earthen vessel) one quart of boiling water, and, when cold, add a sufficiency of white sugar to render it agreeable to the palate.

Cream of tartar is likewise one of the articles used by Dr. Hahneman, to make his celebrated test for detecting lead fraudulently added to Port wine; a practice so prevalent among dealers in that article, that the method of discovering the fraud cannot be too generally known. This test is prepared as follows:—

Two drachms of cream of tartar, one drachm of dry liver of sulphur, are to be shaken in a two-ounce phial, filled with distilled water, well corked; the phial is to be occasionally shaken, for about ten minutes; when the powder has subsided, decant the clear liquor, and preserve it in a well-stopped bottle for use: from sixteen to twenty drops of this liquor are to be dropped into a small glass filled with the suspected wine: if the wine turns blackish or muddy, and deposits a dark-coloured sediment, the adulteration with lead is proved, but not otherwise.

Cream of tartar in powder is sometimes adulterated with sulphate of potash, which may be detected by pouring on half an ounce of the suspected cream of tartar two or three ounces of pure water, shake the mixture frequently, and let it stand one hour; the sulphate of potash being more

soluble than the cream of tartar, will be taken up, and may be known by the *bitter* taste of the solution.

The last new name for Cream of Tartar, is Supertartrate of Potash (*Supertartras Potassæ*).

No. 55. WASHED SULPHUR.

This preparation is better known under the name of the flowers of sulphur. In the dose of half a drachm to a drachm, it operates as an aperient medicine, and, by considerably increasing the insensible perspiration, has proved of great utility in cutaneous obstructions and foulness. It is given with advantage in conjunction with the cream of tartar. (See No. 54.) It is a mild aperient, and in consequence of its operating without exciting heat or irritation in the bowels, it is generally preferred in piles. When the bowels are confined, it will be necessary to add a proportion of the lenitive electuary, to which a little nitre will prove serviceable, if the piles be of an inflammatory nature, (See Piles, No. 85.) The aperient sulphureous water, under the head of Rochelle Salt, No. 2. affords an excellent substitute for this composition, and in cases of inflammation is entitled to the preference.

In *chronic* rheumatism and gouty affections of the joints, unattended with fever, a tea-spoonful of flowers of sulphur, with half the quantity of Jamaica ginger powder, taken every morning in a glass of milk, has proved an excellent remedy.

An ointment made of one part of flowers of sulphur, and four of hog's lard, is an efficacious remedy for the itch, and much safer than mercury: its internal use, is at the same time proper. (See Itch Ointment, No. 107.)

Sulphur, although apparently a medicine of no con-

siderable efficacy, has the property of restraining the action of some of the most powerful poisons. Mercury, by an admixture with it, is almost rendered inert; thus, Æthiop's mineral, which is composed of equal parts of flowers of sulphur and mercury, may be given to the extent of sulphur alone, without manifesting any further effects on the system than might be expected from the exhibition of the sulphur; when mercury, therefore, has exceeded in operation, sulphur is employed to abate the effects. Even the corrosive poison, arsenic, by the addition of sulphur, becomes almost innocent; but, for counteracting the effects of this poison, when taken into the stomach, the liver of sulphur will answer best, on account of its solubility in water, and its more rapid action on mineral poisons. (See Treatment of Mineral Poisons.)

- The preparation of sulphur, termed, (from its colour) *Milk of Sulphur*, so far from possessing any advantage over the flowers or washed sulphur, is certainly less efficacious, the peculiar properties of the sulphur being impaired by the process employed for making it.

The new name for Flowers of Sulphur is Sublimed Sulphur (*Sulphur Sublimatum*).

No. 56. COURT PLASTER.

This well known plaster is an useful application for recent *superficial* cuts, to keep the edges in contact, and defend them from the action of the atmospheric air, &c. If the wound be deep, or attended with much irritation, or the part be bruised, the diachylon plaster, spread on leather or black silk, will answer best. (See Cuts.)

No. 57. LINT.

This is a very useful article in a Medicine Chest for dressing and cleaning sores or ulcers. When applied dry, it will destroy fungous flesh, and with a little pressure stops the bleeding of superficial wounds, and the punctures made by leeches.

No. 58. DIACHYLON PLASTER,

Spread on leather, is a common and good application for slight contusions, excoriations of the skin, chilblains, corns, and fresh cuts.

No. 59. GUM PLASTER,

Is an useful application spread on leather, for promoting the suppuration of boils, and abscesses.

No. 60. PREPARED NATRON, OR SODA.

This salt, dissolved in pure water, in the proportion of three drachms to a pint, forms a valuable alterative medicine, and in the dose of a wine-glassful, two or three times a day, will prove highly beneficial to children affected with scrophula, rickets, scald head, cutaneous eruptions, and acidity in the stomach. (See Rickets and Scrophula.) A weak solution of one ounce in five pints of water, saturated with fixed air by Nooth's machine, is sold under the name of Soda Water, and much recommended as a remedy for stone and gravel. When this water disagrees with the stomach, Dr. Beddoes recommends pills of dried soda and Castile soap as a proper substitute. (See Pills for Gravel and Stone, No. 81.) Natron saturated with fixed air, termed *Carbonate of Soda*, is pre-

ferable to the dried natron. Two drachms of this preparation, dissolved in a quart of water, is superior *as a medicine* to the soda water, on account of the fixed air not being disengaged when exposed to the atmosphere. The article sold in this country under the title of *Soda Water*, is generally made with the carbonate of potash and oil of vitriol; and as a cooling beverage in summer, it may answer as well as the true soda water; but in its *medicinal* properties it is very different, and in cases of stone and gravel will prove of no utility.

Prepared natron is a medicine of great power in the cure of many constitutional diseases; and although slow, is a more certain alterative in complaints of long standing than those of a more active kind. Its *continued* use has, in many instances, succeeded in dispersing schirrhous or cancerous tumours, and in the cure of obstinate cases of scrophula, after mercury and other more active alterative medicines had failed. Mr. Parkinson, in a late dissertation, recommends it as a powerful remedy for the gout. (See Gout.) To children, the solution of it in water, as recommended above, may be conveniently given in milk.

FAMILY PRESCRIPTIONS;

OR

USEFUL COMPOUNDS OF THE DIFFERENT MEDICINES
RECOMMENDED BY THE AUTHOR TO SUPPLY
THE FAMILY MEDICINE CHEST.

INTERNAL REMEDIES.

MIXTURES.

THE difference between this form of medicine and a julep is, that a mixture is composed both of soluble and insoluble substances. As there is no regular measure for the dose of a mixture, many physicians give the preference to a draught, which is a single dose of a mixture. Patients often prefer this liquid form of medicine to either a pill, bolus, or electuary, and in general its operation is more speedy and effectual.

No. 61. *Stomachic Mixture.*

Take of the essential salt of bark, No. 24, one drachm; dissolve in half a pint of distilled water: then add tincture of Jamaica ginger and camomile, No. 7, two drachms.

Two or three table-spoonfuls of this mixture may be taken three times a day. When acidity prevails in the stomach, a drachm of prepared natron, No. 60, or a drachm of magnesia, No. 1, may be added, or in cases of costiveness, unattended with acidity, two or three drachms of Epsom salt.

No. 62. *Aperient Mixture.*

Take of senna leaves, two drachms; infuse in a quarter of a pint of boiling water for half an hour, then strain, and add Rochelle or Epsom salt, No. 2, half an ounce; compound tincture of senna, No. 8, an ounce.

Three table-spoonfuls to be taken every two or three hours, till it operates.

In cases of obstinate costiveness or colic, a dessert-spoonful of castor oil, No. 3, may be taken in each dose, and a laxative clyster, No. 97, will be also necessary, if a speedy evacuation be required.

No. 63. *Sudorific Mixture.*

Take of Mindererus's spirit, No. 10, three ounces; ipecacuan powder, No. 23, ten grains; pure water, five ounces; essence of peppermint, No. 32, fifteen drops. Mix.

Three table-spoonfuls to be taken every two hours, till it produces the desired effect.

N. B. All medicines administered to promote perspiration, should be assisted in their operation by the plentiful use of tepid drinks, such as warm barley water, gruel, tea, or the like.

No. 64. *Cretaceous Mixture.*

Take of the compound cretaceous powder, No. 29, two drachms; gum arabic powder, No. 52, three drachms; laudanum, No. 31, twenty drops; pure water, six ounces; essence of cinnamon, No. 33, forty drops; dissolve the gum arabic in an ounce of water, and rub with it the compound powder; then add the other ingredients.

Two table-spoonfuls to be taken after every loose stool, in cases of diarrhœa or dysentery. (See Diarrhœa, Cretaceous Powder, and Lime Water.)

No. 65. *Anti-hysteric Mixture.*

Take of tincture of asafoetida, No. 19, three drachms; sal volatile, No. 13, two drachms; camphorated julep, No. 28, six ounces. Mix.

Two table-spoonfuls to be taken every three or four hours.

No. 66. *Cough Mixture.*

Take of ipecacuan wine, two drachms, or ipecacuan powder, No. 23, ten grains; gum arabic powder, No. 52, four drachms; laudanum, No. 31, twenty drops; simple oxymel, two ounces; almond emulsion, six ounces. Mix.

Two table-spoonfuls to be taken every two hours, for recent coughs, pleurisy, and inflammation of the lungs. (See Cough.)

No. 67. *Camphorated Bark Mixture.*

Take of essential salt of bark, No. 24, one drachm; dissolve in camphorated julep, No. 28, six ounces; sweet spirit of nitre, No. 15, two drachms. Mix.

Three table-spoonfuls to be taken every two or three hours, in low infectious fevers, purid sore throat, and mortifications.

The bark thus associated, acts, as M. Lassonne has observed, with more energy and force, whether it be employed for the purpose of curing fever or gangrene; and this assertion Dr. Cullen believes, and experience has proved to be well founded.

No. 68. *Asthmatic Mixture.*

Take of paregoric elixir, No. 11, one ounce; camphorated julep, No. 28, six ounces; tincture of asafoetida, No. 19, half an ounce; or vitriolic ether, No. 14, three drachms; honey, half an ounce. Mix.

Two table spoonfuls to be taken with ten grains (in two pills) of the squill pill, No. 45, for *chronic* difficulty of breathing and *spasmodic* asthma unattended with fever. (See Asthma.)

No. 69. *Gout Mixture.*

Take of volatile tincture of guaiacum, No. 20, six drachms; camphorated mixture, No. 28, six ounces; tincture of rhubarb, No. 4, half an ounce; honey, half an ounce; rub the tincture of guaiacum with the honey, in a glass mortar; then add the other article by degrees.

Two table-spoonfuls to be taken every four or five hours. (See Gout.)

This mixture is employed as a restorative, after the inflammatory stage of gout is over.

No. 70. *Anti-spasmodic Mixture.*

Take of æther two drachms; sp. sal volatile, a drachm and a half; liquid laudanum, thirty drops; camphorated mixture, six ounces. Mix.

Two table-spoonfuls to be taken every three or four hours, for spasmodic colic and asthma.

This is a very efficacious remedy in cases of spasms of the stomach. In cases of colic, it should not be administered till three or four evacuations have been procured from the bowels, by means of castor oil, No. 3, or the aperient mixture, No. 61, and clyster No. 97, unless attended with very acute pain in the bowels.

No. 71. *Anti-rheumatic Mixture.*

Take of volatile tincture of guaiacum, No. 20, half an ounce; honey, half an ounce; camphorated julep, No. 28, six ounces; rub the tincture of guaiacum with the honey, in a glass mortar; and add the other articles by degrees.

Two table-spoonfuls to be taken three or four times a day for *chronic* rheumatism. (See Rheumatism.)

No. 27. *Nervous Mixture.*

Take of essential salt of bark, No. 24, one drachm, of extract of rhatany root, a drachm and a half; dissolve in cam-

phorated julep, No. 28, six ounces, then add spirit of sal volatile, No. 13, two drachms; compound spirit of lavender, No. 9, three drachms.

Two table-spoonfuls to be taken three or four times a day. For nervous irritability and periodical head-achs, this is a very valuable remedy,

No. 73. *Absorbent Mixture.*

Take of magnesia, No. 1, one drachm; rhubarb powder, No. 26, ten grains; laudanum, No. 31, six drops; pure water, two ounces; essence of mint, No. 32, four drops. Mix.

A tea-spoonful to be given in cases of gripes, and flatulency, affecting children; if attended with purging, the following mixture will answer best.

Take of lime water, two ounces; compound tincture of cardamom seeds, two drachms; liquid laudanum, six drops—to be given as the preceding mixture.

No. 74. *Stimulating Mixture.*

Take of horse radish root, sliced, and mustard seed, bruised, of each one ounce; infuse in a pint of boiling water in a gentle heat, for twelve hours; then strain and add compound spirit of lavender, No. 9, one ounce.

A wine-glassful to be taken three or four times a day for paralytic complaints. (See Palsy.)

No. 75. *For Scrophula, or King's Evil.*

Take of essential salt of bark, No. 24, two drachms; muriate of lime, three drachms, or prepared natron, two drachms; dissolve in a pint of distilled water; then add compound tincture of rhatany root, No. 6, one ounce.

Three table-spoonfuls to be taken three times a day. (See Scrophula.)

No. 76. *For the Hooping Cough.*

Take of ipecacuan powder, No. 23, ten grains; tincture of asafœtida, No. 19, one drachm; laudanum, ten drops; pure water, two ounces. Mix.

To a child of two years old, a tea-spoonful may be given every three hours, increasing ten drops for every additional year. (See Hooping Cough.)

No. 77. *Tonic Mixture.*

Take of extract of rhatany root, three drachms; dissolve in twelve ounces of water, and add aromatic tincture of rhatany root, one ounce; sp. sal volatile, No. 13, two drachms.

Two or three table-spoonfuls to be taken every three or four hours, for relaxation and weakness of the system; when attended with a sluggish state of the bowels, three drachms of the vitriolated kali may be added, and, in case of profuse perspiration, two drachms of the diluted vitriolic acid may be substituted for the sp. sal volatile.

No. 78. *Saline Mixture.*

Take of crystallized acid of lemon, one drachm, or fresh lemon juice, an ounce and a half; salt of wormwood, No. 21, one drachm; white sugar, three drachms; pure water, twelve ounces; essence of peppermint, No. 32, thirty drops. Mix.

A tea-cupful to be taken frequently in inflammatory fevers and sore throat. (See No. 21 and 22.)

PILLS.

A **PILL** is a form of medicine generally composed of Drugs which operate in small doses, and whose nauseous and offensive taste or smell require them to be concealed from the palate. A pill should be of the consistence of a firm paste, a round form, and not exceed five grains in weight, unless the composition be ponderous.

No. 79. *Asthmatic Pills.*

Take of squill pill, No. 45, two drachms; gum asafœtida, one drachm. Mix, and divide into thirty-six pills.

Two to be taken twice or thrice a day. (See Asthma.)

No. 80. *Pills for Dropsy.*

Take of squill pill, No. 45, two drachms; prepared calomel, No. 34, ten grains; gamboge powder, a scruple. Mix well together, and divide into thirty-six pills.

Three to be taken twice a day, with a wine-glassful of the tonic mixture, No. 77.

After taking these pills six days, the calomel should be omitted, and in the course of ten days, if the mouth be not affected by it, it may again be taken with advantage.—(See Dropsy.)

No. 81. *Pills for the Gravel.*

Take of dried natron, two drachms; Spanish soap, two drachms, with oil of juniper; make into sixty pills.

Of which three are to be taken three times a day. When the mephitic alkaline water (noticed under the head of Salt of Wormwood, No. 21,) disagrees with the patient, this form affords an excellent substitute.

No. 82. *Tonic Pills.*

Take of essential salt of bark, No. 24, one drachm; salt of steel, No. 25, a scruple; gum olibanum, one drachm, with simple syrup; make a mass, and divide into thirty-six pills.

Three to be taken twice a day, for fluor albus and gleet.

No. 83. *Bilious Pills.*

Take of rhubarb, No. 26, two drachms; calomel, No. 34, half a drachm; essence of peppermint, No. 32, ten drops; with a little syrup; make into thirty pills.

Three to be taken every third morning, with a wine-glassful of the solution of the Epsom salt, See No. 2.

No. 84. *Cathartic Pills.*

Take of compound colocynth pill, No. 46, one drachm; calomel, No. 34, fifteen grains; mix, and form into fifteen pills.

Three to be taken for a dose, in obstinate constipation of the bowels, and redundancy of bile.

These pills are sold under the name of Dr. Hugh Smith's Antibilious Pills.

ELECTUARIES.

AN electuary is a form of medicine composed of powders, incorporated with some syrup, or conserve, or honey. As a draught is a single dose of a mixture, so is a bolus a single dose of an electuary. As this form is much disposed to ferment, it should be kept in a cool place. It should be made of the consistency of honey.

No. 85. *For the Piles.*

Take of flowers of sulphur, No. 55, six drachms; lenitive electuary, No. 47, two ounces; nitre powder, No. 53, half a drachm.

A tea-spoonful to be taken twice a day. (See Piles.)

No. 86. *For the Tape Worm.*

Take of granulated tin, six ounces; carbonate of iron, one ounce; conserve of wormwood, three ounces. Mix.

A large tea-spoonful to be taken every morning, with a draught of lime water. (See Worms.)

No. 87. *Cough Linctus.*

Take of spermaceti powder, two drachms; oil of almonds, three drachms; conserve of hips, one ounce; syrup of wild poppies, six drachms; ipecacuan powder, No. 23, ten grains; diluted vitriolic acid, No. 18, ten drops. Mix.

A tea-spoonful to be taken every two or three hours, or when the cough is troublesome.

POWDERS.

THIS form is only proper for such materials that will admit of being sufficiently dried so as to be reduced to powder, without the loss of their virtue; there are, however, many substances of this kind that are not given in powder, on account of their bulk and disagreeable flavour. It is worthy notice, that some articles answer much better in powder than in any other form. The Peruvian Bark and other medicines have only answered in intermittents when given in powder, so that much of their effects may be attributed to their mechanical action on the stomach.

No. 88. *Emetic Powder.*

Take of ipecacuan powder, No. 23, a scruple; emetic tartar, No 35, one grain. Mix.

No. 89. *Diuretic Powder.*

Take of purified nitre, No. 53, one drachm; gum arabic, No. 52, three drachms. Mix, and divide equally into twelve papers.

One to be taken three times a day, with a draught of barley water, for strangury, heat of urine, and gravel.

No. 90. *Worm Powder.*

See Basilic Powder, No. 36.

No. 91. *Tonic Powder.*

Take of Peruvian bark powder, No. 48, or rhatany root powder, one ounce; Jamaica ginger powder, No. 49, half a drachm. Mix, and divide into twelve papers.

One to be taken every, or every other hour, in intermittent fevers.

GARGLES.

A GARGLE is a liquid form of medicine used for washing the mouth or throat, when inflamed, ulcerated, parched, or foul.—The quantity of two table spoonfuls is generally taken into the mouth, moved briskly about, and then spit out; or when the patient is not capable of doing this with any advantage, the liquor may be injected by a syringe, or applied by means of a sponge, secured to the end of a piece of whalebone. The use of a gargle should be repeated every hour in cases of ulceration or inflammation.

No. 92. *Discussient Gargle.*

Take of purified nitre, No. 53, one drachm; gum arabic, No. 52, three drachms; dissolve in half a pint of pure water.

To be used frequently for inflammatory sore throats. (See Inflammation of the Throat.)

No. 93. *Acidulated Gargle.*

Take of red rose leaves, two drachms; infuse in a pint of boiling water till cold; then strain, and add diluted vitriolic acid, No. 18, thirty drops.

For inflammation of the tonsils and mouth.

No. 94. *Astringent Gargle.*

Take of oak bark, half an ounce; boil in a pint of water for a quarter of an hour; then strain, and add, alum, two drachms; red Port wine, four ounces.

To be used every two or three hours, in cases of relaxation, or falling down of the soft palate.

No. 95. *Detergent Gargle.*

Add to the acidulated gargle, No. 93, tincture of myrrh, No. 16, and honey, of each half an ounce.

For the malignant ulcerated sore throat, thrush, and foul ulcers in the mouth.

LAVEMENTS OR CLYSTERS.

THE term lavement, or clyster, signifies any liquid medicine injected into the rectum, or great intestine. This class of medicine is much employed on the continent, but has not met with that attention in England which its importance entitles it to, partly through the antipathy of patients, but principally on account of the difficulty of procuring a person to administer it properly. In order to render this form of medicine more popular, Mr. Savigny has invented a simple machine to enable a person to administer it to himself with the greatest facility. (See Lavement.)

The lavement is used for the same purposes as mixtures. Thus, in cases of costiveness, it not only softens the fæces collected in the lower intestine (often the cause of costiveness,) but also by stimulating the parts, purges the bowels. In cases of obstinate costiveness or obstructions in the bowels, a lavement accelerates the operation of purgative medicines taken by the mouth. In cases of violent diarrhœa, dysentery, and the purging of children, a lavement of vegetable jelly (as starch or arrow root, to which laudanum may be added in case of violent pains or irritation,) is a most important remedy. The Peruvian bark may also be exhibited this way to patients, whose stomachs will not bear it in intermittent fevers, and also laudanum in acute pain in the bowels.

Clysters are likewise used as a fomentation in cases of inflammation of the bladder, womb, or bowels, and for nourishing the body when the patient cannot retain food, or the stomach is not able to swallow it, through inflammation of the throat, or obstruction in the gullet.

The following are the most useful :

No. 96. *Anodyne Lavement.*

Take of starch jelly, half a pint; laudanum, No. 31, forty drops. Mix.

The whole to be injected by means of a pewter lavement syringe* in cases of dysentery, violent purging, and pain in the bowels.

* There are several sorts of this instrument : the one with a curved or flexible tube is the most convenient, on account of enabling the patient to administer the lavement to himself.

No. 97. *Laxative Lavement.*

Take of Epsom salt, No. 2, two ounces. Dissolve in three quarters of a pint of warm gruel or broth, with an ounce of fresh butter, or sweet oil.

No. 98. *Anti-spasmodic Lavement.*

Take of tincture of asafœtida, No. 19, half an ounce; laudanum, No. 31; forty drops, gruel, half a pint. Mix.

For spasmodic affections of the bowels.

No. 99. *Nutrient Lavement.*

Take of strong beef tea, twelve ounces; thicken with harts-horn shavings, or arrow root.

In cases of extreme debility of the body, or when the patient cannot take food by the mouth through some obstruction in the throat, this affords considerable support to the system, and has been the means of preserving the lives of patients till the cause has been removed.

It should be thrown up with a flexible tube, longer than the clyster pipes in common use, gently insinuated up the rectum: In consequence of the improper exhibition of this composition, a diarrhœa has been produced, which the reduced state of the patient could ill bear.

EXTERNAL APPLICATIONS.

LOTIONS AND EMBROCATIONS.

A Lotion is a form of medicine chiefly composed of an aqueous liquid, used as a wash, or applied by folds of linen.

No. 100. *Eye Water.*

Take of Goulard's extract of lead, No. 30, ten drops; white wine vinegar, two drachms; laudanum, No. 31, thirty drops; distilled water, eight ounces. Mix.

For inflammation of the eye, or eye lids.

To be frequently applied by means of folds of fine old linen, over the affected eye or eyes. (See Inflammation of the Eye.)

No. 101. *Astringent Eye Water.*

Take of blue vitriol, one grain; dissolve in four ounces of distilled water, and add laudanum, No. 31, thirty drops.

To be dropped between the eyelids of the affected eye, three or four times a day, for films or specks.

No. 102. *Discutient Lotion.*

Take of camphor, No. 28, two drachms; dissolve in rectified spirit of wine, four ounces; then add white wine vinegar, a pint.

For strains, bruises, and inflammation arising from accidents.

It may be conveniently applied in the form of a poultice, by adding a sufficient quantity of bran to make it of a proper consistence, and pouring on the surface a fresh quantity of the embrocation, when the bran gets dry, or feels warm to the patient.

No. 103. *Volatile Liniment.*

Take of spirit of hartshorn, No. 12, six drachms; olive oil, an ounce; shake well together.

This is a good stimulating liniment for chronic rheumatism, paralytic numbness, and stiffness of joints.

No. 104. *Liniments for Burns and Scalds.*

Take of linseed oil and lime-water, of each four ounces; laudanum, No. 31, half an ounce. Mix.

To be applied by means of lint, or soft old linen: or

Take of expressed juice of potatoes, half a pint; spirit of wine, three ounces; liquid laudanum, half an ounce. Mix.

To be applied as above.

The efficacy of the latter liniment in recent scalds and burns, has lately been much extolled by several able surgeons in London.

OINTMENTS.

OINTMENT is a composition of animal fat or fixed oil with other substances for external uses; it differs from liniment and plasters in consistence only, being thicker than the latter and thinner than the former. When they contain a large proportion of wax, and of a consistence between that of ointment and plaster, it is termed cerate. Ointments are not only used to defend wounds from the action of the cold air, but also to assuage pain and inflammation, to produce an healthy discharge from ulcers, and often as an external dressing, to retain on the part such other applications as may be necessary to destroy fungus, &c. The following are the most useful:

No. 105. *Pile Ointment.*

Take of spermaceti ointment, No. 41, one ounce; Goulard's extract of lead, No 30, fifteen drops; laudanum, No. 31, one drachm. Mix well together.

(See Piles.)

No. 106. *Alterative Ointment.*

Take of nitrated quicksilver ointment, and spermaceti ointment, of each equal parts. Mix well together.

To be rubbed over the part affected every morning, for scald head. (See Scald Head.)

No. 107. *Itch Ointment.*

Take of flowers of sulphur, No. 55, two ounces; hog's lard, four ounces; oil of lavender, sixty drops. Mix.

To be well rubbed on the parts affected every night, till the eruption ceases to be troublesome. (See Itch.)

 PLASTERS.

No. 108. *Pectoral Plaster.*

Take of Burgundy pitch, two ounces; blistering plaster, No. 40, three drachms; camphor, No. 28, one drachm.

Melt the Burgundy pitch over a gentle heat, and when cooling, add the blistering salve, and lastly, the camphor, in powder. To be spread on leather, and applied over the breast bone, in cases of asthma, difficulty of breathing, hooping-cough, and consumption of the lungs.

No. 109. *Corn Plaster.*

Take of hemlock plaster, with gum ammoniac, an ounce; camphor, one drachm. Mix, and spread on thin leather.

The application of this plaster will not only alleviate the pain attendant on corns, but often succeed in removing them. (See Corns.)

No. 110. *Discutient Plaster.*

Take of soap and hemlock plasters, of each three ounces; camphor, two drachms.

Melt the two plasters together, over a gentle heat, and afterwards add the camphor in powder. To be spread on leather,

for rheumatic pains, indolent tumours, and chronic enlargement of joints.

CATAPLASMS OR POULTICES.

THE most frequent intention of a poultice is to soothe a part which is irritated, and to allay inflammation; but it may also be used to defend a sore from the action of the atmosphere, whilst a natural cure is going on, as is advised by the late Mr. Hunter.

In the common *bread poultice*, it has been the custom for a long period to employ milk, but as it is very liable to turn sour by the heat of the body, and possesses no advantage over water, the latter is now preferred by surgeons: poultices are not only used to abate inflammation, or promote suppuration, but also for the purpose of stimulating the skin in cases of palsy, or for producing a determination of blood to the extremities, in cases of plethoric or inflammatory affections of the head.

Cataplasm or poultice is generally formed of vegetable substances, and applied of such a consistence as neither to adhere much or run. They are also more useful when the intention is effected by the *perpetuity* of the heat or cold, which they communicate, for they retain these properties longer than any other kind of external application.

The following are the most useful:

No. 111. *Mustard Poultice.*

Take of flour of mustard, one part; oatmeal, three parts; vinegar, a sufficient quantity to form a poultice.

Boil the oatmeal and vinegar together, and afterwards sprinkle in the flour of mustard. To be applied warm.

No. 112. *Emollient Poultice.*

Take of pure water, half a pint; crumbs of white bread, a sufficiency to form a poultice; then add, Goulard's extract of lead, No. 30, forty drops. Mix well together.

Milk, so generally employed for making discutient poultices, by soon turning sour, from the heat of the body, becomes a bad external application for allaying inflammation.

No 113. *Suppurative Poultice.*

Take of oatmeal, half a pound; strong beer grounds, a sufficiency to form a poultice; then add one drachm of camphor,

dissolved in half an ounce of spirit of turpentine. Mix well together.

To be applied warm, for the purpose of promoting the maturation of indolent tumours, or boils.

DECOCTIONS.

DECOCTIONS differ from infusions only in the action of the water being assisted by a boiling heat. Although this increased heat may hasten the extraction of the medicinal virtue of many articles, it decomposes and dissipates all volatile matters. Boiling, therefore, is only necessary for the solution of principles that are not volatile or altered by heat. Decoctions should be made in vessels sufficiently large to prevent any risk of boiling over, and should be continued gently and without interruption.

The virtues of the productions of the vegetable kingdom employed in medicine, being imparted to water, either by boiling or by infusion, decoctions and infusions are much prescribed by practitioners in preference to tinctures. Of these preparations the following are most in use :

No. 114. *Decoction of Peruvian Bark.*

Take of Peruvian bark bruised, one ounce ; water a pint and quarter.

Boil for ten minutes in a covered vessel, and strain the liquor while hot.

No. 115. *Decoction of White Hellebore Root.*

Take of white hellebore root bruised, one ounce ; water, one quart ; to be boiled till the water is reduced to a pint, then strain, and add rectified spirit of wine two ounces.

This decoction is employed as a lotion for the itch, which it frequently cures, and is exempt from the great objection made to sulphur ointment and mercury.

No. 116. *Decoction of Marsh Mallow Root.*

Take of marsh-mallow roots bruised, three ounces ; raisins stoned one ounce : water three pints and a half.

Boil the ingredients in the water till it is reduced to two pints, then strain off the liquor, and let it stand for two or three hours to settle.

This decoction is chiefly used in cases of gravel, strangury,

and cough. It is in no respect superior to the compound decoction of barley.

No. 117. *Decoction of Iceland Liverwort.*

Take of Iceland liverwort one ounce and a half; liquorice root sliced, three drachms; water one quart.

After freeing the liverwort from the green moss, and washing it in cold water, boil it in the water to a pint and a half, and strain while warm.

No. 118. *Compound Decoction of Sarsaparilla.*

Take of the root of sarsaparilla, sliced and bruised, six ounces; bark of the root of sassafras; shavings of guaiac wood; liquorice root, of each one ounce; mezereon, three drachms; distilled water, ten pints; macerate for six hours, then boil it down to five pints, adding, towards the end of the boiling, the mezereon and sassafras, and strain the liquor for use.

This decoction is an improvement on the once highly celebrated *Lisbon Diet Drink*, which, for some time after its first introduction into Great Britain, was kept a secret. In the dose of four and six ounces three or four times a day, it has been found very serviceable in obstinate rheumatic affections, particularly when the consequence of the long use of mercury. It is also an excellent alterative in scrophula, schirrous affections of the womb, and cutaneous foulnesses.

INFUSIONS.

WHEN the medicinal virtues of any substance chiefly reside in an essential oil or in a volatile matter, then extraction by infusion is preferred to decoction, as by the latter these active parts are evaporated. The process consists in pouring on the bruised substance in a proper vessel the liquor, either hot or cold, and afterwards covering it over. The liquor should be slightly agitated, and after standing the proper time, poured off, or strained through fine linen. Maceration differs from infusion, in being continued a longer time, and can only be employed for substances which do not easily ferment or spoil. The following infusions are principally in use:

No. 119. *Infusion of Rhatany Root.*

Take of Rhatany root, one ounce; boiling water, one pint; macerate for twenty-four hours, and strain through fine cloth.

This elegant form contains the active principles of the Rhatany root and agrees much better with weak or delicate stomachs, than either the powder or decoction of it. It is given in the quantity of a small wine-glassful, to which it is customary to add a tea-spoonful of the compound tincture of cardamoms.

No. 120. *Bitter Infusion.*

Take of gentian root, sliced, one drachm; dried Seville orange peel, one drachm and a half; fresh outer rind of lemon, half an ounce; boiling water, three quarters of a pint; macerate for an hour, and strain for use.

This infusion is in very common use as a stomachic medicine, in the quantity of three table-spoonfuls two or three times a day.

No. 121. *Alkaline Bitter Infusion.*

Take of the bitter infusion, eight ounces; salt of wormwood, twenty grains; mix.

This is to be taken in the same manner as the preceding infusion. In cases of indigestion, especially when acidity prevails in the stomach, this is a very excellent remedy.

No. 122. *Infusion of Valerian.*

Take of valerian root bruised, one ounce; infuse in three quarters of a pint of boiling water; when cold strain off the liquor, and add six drachms of compound spirit of lavender and three of spirit of sal volatile. A wine-glassful may be taken three or four times a day, in nervous and paralytic disorders.

No. 123. *Infusion of Rhubarb.*

Take of Rhubarb root, bruised, a quarter of an ounce; boiling water, a quarter of a pint; spirit of cinnamon, one ounce; macerate the rhubarb in a close vessel with the water for twelve hours, then add the spirit of cinnamon, and strain the liquor.

This is a very excellent, and perhaps the best preparation of rhubarb, when designed as a purgative, as the virtue of the rhubarb is more readily imparted to water than any other liquor. The dose is from two to four table-spoonfuls.

No. 124. *Infusion of Roses.*

Take of red rose leaves, half an ounce; boiling water, two pints; vitriolic acid, half a drachm by weight; white sugar,

one ounce; macerate the rose leaves with the water in an earthen vessel (not glazed with lead) for four hours, then add the vitriolic acid, strain the liquor, and dissolve it in the sugar.

This is an excellent and efficacious medicine in hæmorrhages, either from the nose, womb, stomach, or lungs, in the quantity of three table-spoonfuls every three or four hours.

No. 125. *Infusion of Senna.*

Take of senna leaves, three drachms; boiling water, five ounces; coriander or caraway seeds, bruised, one dram; macerate them for an hour in a covered vessel, and strain through fine cloth.

This is a very efficacious purge in the dose of three or four spoonfuls. The caraway or coriander seeds not only cover the ill flavour of the senna, but also correct its griping quality. It should be always used fresh, as it is apt to spoil very quickly.

No. 126. *Infusion of Linseed.*

Take of linseed, one ounce; liquorice root, two drachms; boiling water, two quarts; to be macerated for six hours, stirring the mixture with a spoon about every hour, in order that the mucilage of the seeds may be suspended.

This is a very useful beverage in cases of inflammation of the lungs, recent coughs, the measles, gravel, inflammation of the bladder, and strangury.

APPENDIX TO THE FAMILY DISPENSATORY.

The following Alphabetical Catalogue of Drugs the Author has added, in order to enable his Readers to proportion the Doses of Medicines to the Age of the Patient with Accuracy, and as a Guide for administering the Medicines which are omitted in the preceding Part, on account of their being seldom used in Domestic Medicine.

The Doses specified in the following List are such as are usually administered. They should therefore be increased or diminished, according to the strength of the patient, and the age, by the following Rule:

Two-thirds of the dose, from the age of 14 to 16.—One-half from 7 to 10.—One-third, from 4 to 6.—One-fourth, to one of 3 years.—One-eighth, to one of a year.

CATALOGUE OF DRUGS.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children, from 2 to 4 years.			
Æther	30 dps. to 1 dm.	8 to 10 drops	cold water	antispasmodic . . .	asthma, cramp, and flatulence
Æthiop's Mineral . . .	15 to 30 grains.	5 to 10 grains	honey, twice a day .	alterative	scald head, cutane. foulness
Almonds, Emulsion of .	a wine-glassful	1 to 2 ta. spfs.	every 2 or 3 hours .	demulcent	strangury, cough
— Oil of	1 to 3 drams	30 dps. to 1 dm.	honey, ditto	ditto	ditto, ditto
Aloes, Socotorine . . .	10 to 20 grains	3 to 6 grains	in pills	purgative	obstinate costiveness
— Tincture of	3 to 6 drams	1 to 2 drams	water	ditto and vermifuge.	ditto and worms
Alum Powder	3 to 10 grains	. . . . .	ditto, 3 times a day .	astrigent	flooding
Amber, Rectified Oil of	8 to 10 drops	1 to 3 drops	honey, twice a day .	antispasmodic . . .	hysteric fits, whooping cough
Ammoniac Gum	10 to 15 grains	. . . . .	in pills, ditto . . .	expectorant	chronic cough, asthma, &c.

Ammoniac Gum, Milk of	3 table-sp. fuls from 3 to 5 grs.	a dessert sp. ful	2 or 3 times a day	ditto	ditto
Antimonial Powder	2 to 4 drams	1 to 3 grains	honey	sudorific	inflamm. fever, pleurisy, &c.
— wine, (as an emetic)	12 to 20 drops	1 to 3 drams	water	emetic	
— wine, (as an alterative)	15 to 30 grains	4 to 8 drops	barl. wat. twice a day	sudorific	St. Anth. fire, cutan. foulness
Aromatic confection	5 to 10 grains	4 to 8 grains	cinnam. wat. 2 or 3 do.	aststringent and cordial	purging, cramp in the stom.
— species	4 to 8 drams	2 to 3 grains	water, ditto	stomachic	indigestion, flatulence
Asafetida emulsion.	30 to 60 drops	2 tea-spoonfuls	every 3 or 4 hours	antispasmodic	hyster. asthma, hoop, cough
— tincture of	20 to 40 drops	8 to 12 drops	water, ditto	ditto	ditto, ditto
— volat. spirit of	10 to 15 grains	4 to 8 drops	water, ditto	ditto	ditto, and fainting
— pill	20 to 40 drops	6 to 8 drops	in pills, twice a day	diuretic and balsamic	ditto
Balsam of copaiva	5 to 10 drops	ditto	in honey, ditto	stimulant.	whites, gleet, gravel
— of Peru	20 to 40 drops	ditto	ditto	ditto	flatulence, asthma, gleet
— traumatic	30 to 60 drops	ditto	ditto, or sugar ditto	ditto	ditto
— tolu, tincture of	20 to 60 grains	10 to 15 grains	ditto, or water ditto	ditto and pectoral	ditto, and chronic cough
Bark Peruvian, powder	3 to 4 ta. sp. fs.	1 to 2 ta. sps.	mint wat. 4 or 6 times	tonic	ague, indigestion, weakness
— decoction of	5 to 10 grains	2 to 3 grains	3 or 4 times a day	ditto	relaxation and weakness
— essential salt of	2 to 4 drams	40 to 60 drops	Port wine, ditto	ditto	ditto
— tincture of	2 to 4 drams	40 to 60 drops	water, ditto	ditto	ditto
— ditto, Huxham's	1 to 2 drams	10 to 20 drops	ditto, ditto	ditto	ditto
— ditto, volatile	20 to 25 grains	6 to 8 grains	ditto	ditto	indigestion, heartburn
Basilic powder	1 to 2 grains	half to 1 grain	honey, twice a week	vermifuge & cathartic	worms, costiveness, dropsy
Calomel	2 to 4 grains	1 to 2 grains	in a pill, twice a day	alterative	vene. disease, foul ulcers, &c.
Camphire	2 to 4 ta. sp. fs.	3 to 4 drams	ditto, ditto	antispasmodic	hooping cough, convuls. fits
— Julep of	4 to 8 grains	2 to 3 drams	three times a day	ditto and febrifuge	nervous fever, ditto
Canella alba, powder of	2 to 3 drams	2 to 4 drams	mint water, ditto	stomachic	indigestion, flatulence
— tincture of	2 to 3 drams	2 to 4 drams	water, ditto	ditto	ditto
Cardamoms, tincture of	2 to 3 drams	2 to 4 drams	ditto, ditto	stimulant.	ditto, and cramp
— comp. ditto	2 to 4 drams	2 to 4 drams	camomile tea ditto	stomachic	ditto

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children, from 2 to 4 years.			
Castor, Russian, powd. of	5 to 10 grains	3 to 5 grains	camphorated julep do.	antispasmodic	convuls. fits, nerv. irritability
— tincture of . . .	1 to 2 drams	15 to 30 drops	ditto ditto	ditto	ditto
Castor oil	4 to 8 drams	3 to 4 drams	mint water	purgative	colic, costiveness
— cold expressed	4 to 10 drams	3 to 5 drams	ditto	ditto	ditto
Cascarilla powder . .	10 to 20 grains	3 to 6 grains	ditto, 3 times a day	stomachic	indigestion, weakness
— tincture of . . .	1 to 3 drams	20 to 30 drops	water, ditto	ditto	ditto
— volatile ditto	40 to 60 drops	. . . . .	ditto ditto	ditto	gout, flatulence, heartburn
Catechu, tincture of .	1 to 2 tea-spf.	10 to 20 drops	mint water, ditto	astrigent	chronic looseness, flooding
Chalk, prepared . . .	10 to 15 grains	4 to 6 grains	ditto, 4 times a day	ditto	looseness, acidity
Camomile flowers, powder of	10 to 20 grains	6 to 10 grains	[times a day mint water, 2 or 3	stomachic & vermifuge	indigestion, worms, &c.
— tincture of, and					
ginger	10 to 40 drops	. . . . .	water, 3 or 4 ti. a day	stomachic	gout, cramp in the stomach
Cinnamon powder . .	5 to 10 grains	2 to 4 grains	ditto, 3 times a day	ditto	indigestion, flatulence, &c.
— essence of . . .	3 to 10 drops	1 drop	water	stimulant	flatulency, colicky pains
— tincture of . . .	3 to 4 drams	20 to 30 drops	ditto	astrigent	looseness, &c.
Columbo powder . . .	10 to 20 grains	3 to 5 grains	mint water, 3 ti. a day	stomachic	indigestion, chronic looseness
— tincture of . . .	1 to 3 drams	10 to 20 drops	ditto, ditto	ditto	ditto
Crab's Claws, prepared	15 to 20 grains	5 to 10 grains	do. every 3 or 4 hours	astrigent	purg. dysentery, acidity
Cretaceous powder, with					
opium	10 to 20 grains	5 to 8 grains	ditto ditto	ditto	obstinate purg. & dysentery
Contrayerva powder .	20 to 40 grains	6 to 10 grains	water, ditto	odorific	recent colds
— compound	30 to 40 grains	8 to 12 grains	mint water, ditto	ditto and astrigent	purg. of children
Cream of tartar . . .	1 to 4 drams	20 to 30 grains	honey, every morning	aperient and alterative	inflam. erupt. of the skin, &c.

Colocynth pill compound	10 to 20 grains	4 to 8 grains	occasionally	.	.	active purgative	.	costiveness
— extract	10 to 15 grains	4 to 6 grains	ditto	.	.	ditto	.	obstinate ditto, or colic
— powder	10 to 15 grains	.	ditto	.	.	ditto	.	ditto
Dover's powder	10 to 20 grains	3 to 6 grains	in water	.	.	sudorific and anodyne	.	rheumatism, recent colds &c.
Elixir of vitriol	10 to 12 drops	5 to 6 drops	ditto, twice a day	.	.	stomachic	.	indigestion, flatulence, vomit.
Electuary, Lenitive	2 to 3 drams	half to 1 dram	occasionally	.	.	gentle aperient	.	costiveness
Epsom salt	4 to 8 drams	2 to 3 drams	mint water	.	.	ditto	[emetic	ditto
Foxglove powder	half to 3 grains	.	ditto	[4 times a day	.	violent purgative and	.	dropsy
— tincture of	10 to 40 drops	.	decoc. of liverwo. 3 or	.	.	sedative	.	consumption of the lungs
Gentian, tincture of	1 to 2 drams	12 to 30 drops	water, ditto	.	.	stomachic	.	indigestion, flatulence, &c.
— extract of	5 to 10 grains	.	in a pill, twice a day	.	.	ditto	.	ditto
Ginger powder	20 to 60 grains	.	water, ditto	.	.	stimulant	.	gout, indigestion, flatulence
— lozenges of	3 or 4	.	twice a day	.	.	ditto	.	flatulency
— tincture of	1 to 2 drams	.	water ditto	.	.	ditto	.	ditto
Gualiac gum	5 to 15 grains	.	in pill, ditto	.	.	ditto and sudorific	.	chronic rheumatism, gout
— volatile tincture	1 to 3 drams	.	water, 2 or 3 ti. a day	.	.	ditto	.	ditto
Hartshorn, spirit of	20 to 40 drops	5 to 8 drops	ditto	.	.	stimulant	.	hysterics, convul. heartburn
— burnt prepar.	20 to 40 grains	6 to 10 grains	mint water, ditto	.	.	astrigent	.	purging, acidity, heartburn
Hoffman's anodyne liquor	30 to 40 drops	6 to 10 drops	water, ditto	.	.	antispasmodic	.	nerv. fever, asthma, hysterics
Hemlock, powdered	2 to 3 grains	1 to 2 grains	mint water, ditto	.	.	sedative	.	hooping cough, cancer
— extract of	2 to 3 grains	1 to 2 grains	ditto, or pill, ditto	.	.	ditto	.	ditto
Hiera piera	15 to 20 grains	4 to 8 grains	mint water	.	.	purgative & stomachic	.	costiveness, flatulency
— tincture of	2 to 4 drams	30 to 40 drops	water	.	.	ditto, ditto, & vermifu.	.	ditto, ditto, and worms
Jalap powder	20 to 30 grains	5 to 10 grains	mint water	.	.	active purgative	.	costiveness
— tincture of	2 to 4 drams	.	ditto	.	.	ditto	.	ditto
Ipecacuan powder	20 to 30 grains	5 to 10 grains	water	.	.	emetic	.	.
— wine	4 to 8 drams	2 to 3 drams	ditto	.	.	ditto	.	.
Iron—see Steel	.	.	.	.	.	.	.	.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
	Adults.	Children, from 2 to 4 years.			
Kino gum, tincture of . . .	2 to 3 drams	15 to 20 drops	mint wat. 3 or 4 times	astrigent . . .	looseness
Lavender, comp. spirit of . .	30 to 80 drops	10 to 20 drops	water . . .	cordial . . .	fainting, or lowness of spirits
Logwood, decoction of . . .	a wine-glassful	1 to 2 tab. spful	3 or 4 ti. a day [a day	astrigent . . .	looseness, dysentery
— extract of . . .	10 to 20 grains	3 to 4 grains	in cinnamon water 3 ti. ditto	ditto . . .	ditto
Madder powder . . .	30 to 60 grains	. . .	mint wa. 2 or 3 times	deobstruent . .	chlorosis or green sickness
— extract of . . .	10 to 20 grains	4 to 10 grains	ditto, ditto	astrigent and tonic	ditto, and scrophula
Magnesia . . .	20 to 40 grains	5 to 10 grains	mint water . . .	absorbent . . .	heartburn and acidity
— calcined . . .	ditto	ditto	ditto . . .	ditto . . .	ditto, ditto
Manna . . .	3 to 6 drams	1 to 2 drams	ditto, or tea . . .	gentle aperient	costiveness
Mercurial pill . . .	6 to 12 grains	2 to 4 grains	in pills twice a day	alterative . . .	venereal disease
Mercury, calcined . . .	1 to 2 grains	quarter grain	in a pill ditto	ditto . . .	ditto
— with chalk . . .	5 to 10 grains	3 to 4 grains	honey, ditto	ditto . . .	[ness, &c.
Mistletoe powder . . .	20 to 60 grains	8 to 12 grains	mint water, 3 ti. a day	tonic . . .	scald head, cutaneous foul-
Mithridate . . .	15 to 20 grains	5 to 10 grains	ditto, ditto	astrigent . . .	epileptic fits
Musk . . .	5 to 40 grains	2 to 5 grains	ditto, ditto	antispasmodic	purging, dysentery
Muriatic acid . . .	10 to 30 drops	6 to 10 drops	water, twice a day	alterative . . .	convulsions, locked jaw, &c.
Myrrh powder . . .	5 to 10 grains	2 to 4 grains	mint water, ditto . .	strengthening	scrophula, cutaneous erupt.
— tincture of . . .	1 to 2 drams	10 to 15 drops	water, 2 or 3 ti. a day	ditto . . .	green sickness, weakness
— emulsion . . .	2 to 3 ta. sp.fuls	2 to 3 drams	2 or 3 times a day	ditto, and expectoran.	ditto, ditto, & chronic coughs
Natron, prepared . . .	5 to 10 grains	2 to 3 grains	mint water, 2 or 3 ti.	alterative . . .	scrophula, heartburn, cancer
— super carbonated	5 to 10 grains	2 to 4 grains	water ditto	ditto . . .	ditto, ditto, and vomiting
Nitre powder . . .	5 to 20 grains	2 to 4 grains	barley water, ditto	diuretic and febrifuge	strangury, heat of urine, fever
— sweet spirit of . . .	20 to 60 drops	8 to 10 drops	ditto, ditto	ditto, ditto	ditto, ditto
Nitric acid . . .	12 to 30 drops	4 to 6 drops	water . . .	tonic . . .	diabetes, scrophula

	4 to 6 drams	1 to 2 drams	ditto	carminative	flatule. cramp in the stomach
Nutmegs, spirit of . . .	10 to 20 grains	3 to 6 grains	belus	ditto and opiate	purging, gripes, &c.
Opiate confection . . .	1 to 2 grains	$\frac{1}{4}$ grain	pill	anodyne	restlessn. acute pains, asthm.
Opium, purified . . .	10 to 30 drops	3 to 5 drops	mint water	ditto	ditto, ditto
— tincture of . . .	10 to 20 grains	5 to 8 grains	ditto, 4 times a day	absorbent & astringent	purging, acid. in stomach &c.
Oyster shells, prepared	3 to 4 drams	15 to 20 drops	barley water	anodyne	cough, asth. pain in the bow.
Paregoric elixir . . .	3 to 6 drops	1 to 2 drops	water	carminative	colicky pain, flatulency, &c.
Peppermint, essence of .	5 to 10 grains	1 to 3 grains	in a pill	anodyne	spasms, acute pain, cough
Poppies, white, extract of	1 to 4 drams	tea-spoonful	water	ditto	ditto, ditto
— syrup of . . .	30 to 60 drops	10 to 12 drops	ginger tea, 2 or 3 times	stomachic	indigestion, flatulency
Quassia, tincture of . .	10 to 40 grains	5 to 8 grains	mint wa. every 2 hours	tonic	ague, diabetes
Rhatania powder . . .	2 to 4 drams	30 to 40 drops	mint wa. 3 times a day	stomachic	indige. relaxation, whites, &c.
— tincture of . . .	ditto . .	ditto . .	ditto	ditto, and cordial	ditto, ditto, ditto
— comp. ditto . . .	ditto . .	ditto . .	ditto	ditto, ditto	ditto, ditto
— aron. atic ditto . .	20 to 30 grains	5 to 8 grains	in mint water	aperient	costiveness
Rhubarb powder . . .	4 to 6 drams	1 to 2 drams	ditto	ditto and carminative	ditto, colic, &c.
— tincture of . . .	2 to 3 drams	3 to 4 drops	wat. one or twi. a day	aperient & stomachic	indigestion, flatulency, &c.
— bitter ditto . . .	2 or 3	1 . .	twice a day	stomachic	ditto, ditto
— lozenges with ginger	6 to 12 drams	2 to 4 drams	mint water	aperient	costiveness
Rochelle salt . . .	1 to 2 ounces	3 to 4 drams	2 or 3 times a day	stomachic & astringent	indigestion, flooding, &c.
Roses, infusion of . .	1 to 2 drams	1 dram	ditto	ditto, and pectoral	cough
— conserve of . . .	1 to 2 drams	30 to 40 drops	water	cordial . .	lowness of spirits
Saffron, tincture of . .	2 to 3 drams	a tea spoonful	ditto	ditto	ditto
— syrup of . . .	6 to 12 drams	3 to 4 drams	mint water	purgative	costiveness, &c.
Salt, Glauber's . . .	6 to 8 drams	2 to 4 drams	ditto	ditto	ditto
— Epsom . . .	6 to 12 drams	2 to 4 drams	ditto	ditto	ditto
— Cheltenham . . .	1 to 3 drams	30 to 40 grains	ditto	cooling aperient	feverish heats
— Polyehrest . . .	6 to 12 drams	2 to 3 drams	in gruel or broth	gentle aperient	costiveness, &c.
— tasteless . . .					

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for.
	Adults.	Children, from 2 to 4 years.			
Salt of Tartar	8 to 10 grains	1 to 4 grains	mint water	alkaline	heartburn, rickets
— of Wormwood . . .	ditto	ditto	ditto	ditto	ditto, ditto
Sarsaparilla powder . .	20 to 60 grains	5 to 10 grains	ditto, 2 or 3 times a day	alterative	scrophula, &c.
— comp. decoct. . . .	3 to 4 ounces	1 to 2 ounces	3 or 4 times a day	ditto	ditto
Scammony powder . . .	10 to 15 grains	4 to 5 grains	mint water	strong purgative . .	obstinate costiveness
— comp. ditto	15 to 30 grains	5 to 6 grains	ditto	ditto	ditto
— comp. with calomel .	15 to 25 grains	5 to 6 grains	honey	ditto, and vermifuge	ditto, worms and dropsy
Senna, infusion of . . .	2 to 3 ounces	3 to 4 drams	occasionally	purgative	costiveness and worms
— tincture of	6 to 12 drams	2 to 3 drams	water	ditto	ditto, and colic
Soluble Tartar	4 to 6 drams	1 to 2 drams	mint water	ditto	ditto, and piles
Spermaceti powder . . .	1 dram	20 to 30 grains	honey 3 or 4 ti. a day	demulcent	recent cough
Spirit, Mindererus's . .	half an ounce	1 dram	mint water, ditto	sudorific and cooling	ditto, inflam. fever, pleurisy
— of vitriol, sweet . .	20 to 40 drops	6 to 8 drops	ditto	antispasmodic & carmina.	nervous debility, flatule. &c.
— nitre	15 to 30 drops	6 to 8 drops	barley water	diuretic and febrifuge	strangury, gravel, fevers
—, sal ammoniac . . .	ditto	6 drops	water	stimulant	hysterical and fainting fits
—, sal volatile	20 to 30 drops	ditto	ditto	ditto	ditto, ditto
—, sal vol. fetid . . .	20 to 40 drops	ditto	ditto	ditto	ditto, ditto
Syrup of white Poppies .	2 to 4 drams	1 to 2 drams	2 or 3 times a day	anodyne	coughs, restless. irritat. fever
— Buckthorn	2 to 4 drams	1 tea spoonful	mint water	strong cathartic . .	costiveness
— Ginger	2 to 3 drams	1 dram	water	carminative	flatul. cramp in the stomach
Sponge, burnt	20 to 30 grains	10 to 15 grains	honey, twice a day	alterative	scrophula
— lozenges of	1 to 3	1	twice a day	ditto	wen
Squills, powder	2 to 3 grains	. . . .	in a pill, twice a day	expectorant & diuretic	dropsy, asthm. chronic cough
— oxymel	2 to 4 drams	1 dram	mint water, ditto	ditto	dropsy, chronic cough, asth.

— tincture . . .	30 to 40 drops	6 to 10 drops	ditto,	ditto	ditto	ditto,	ditto,	ditto
— lozenges of . . .	3 to 6	1 to 2	twice a day	ditto	ditto	ditto,	ditto,	ditto
Steel, muriated tinct. of	10 to 30 drops	3 to 6 drops	water, twice a day	water, twice a day	tonic	indigest.	rickets, worms, &c.	ditto
— wine of . . .	3 to 6 drams	1 to 2 drams	ditto	ditto	ditto	ditto,	ditto,	ditto
— salt of . . .	1 to 3 grains	half a grain	pill,	ditto	ditto	ditto,	ditto,	ditto
— powder of . . .	10 to 40 grains	4 to 6 grains	honey,	ditto	ditto	ditto,	ditto,	ditto
— red sulphate of . . .	3 to 12 drops	1 to 2 drops	water	water	ditto	cutaneous foul.	piles, worms	ditto
Sulphur, flowers of . . .	1 to 2 drams	20 to 30 grains	honey, once a day	honey, once a day	alterative & aperient	ditto,	ditto,	ditto
— milk of . . .	ditto . . .	ditto . . .	ditto,	ditto	ditto	emetic	emetic	ditto
Tartar, emetic . . .	1 to 2 grains	$\frac{1}{4}$ to $\frac{1}{2}$ grain	water	water	vermifuge	vermifuge	worms	worms
Tin powder . . .	20 to 40 grains	10 to 15 grains	honey, every morning	honey, every morning	purgative	purgative	costiveness, worms	costiveness, worms
Tincture of aloes . . .	3 to 6 drams	1 to 2 drams	water	water	antispasmodic	antispasmodic	hysterics, asth. hoop, cough	hysterics, asth. hoop, cough
— asafetida . . .	30 to 60 drops	4 to 8 drops	ditto, twice a day	ditto, twice a day	stimulant	stimulant	flatulence, asthma	flatulence, asthma
— benzoin . . .	15 to 30 drops	6 to 8 drops	honey ditto	honey ditto	diuretic	diuretic	hooping cough	hooping cough
— cantharides . . .	10 to 30 drops	6 to 8 drops	barley wat. twice a day	barley wat. twice a day	stomachic	stomachic	indigestion, flatulence	indigestion, flatulence
— cardamoms . . .	2 to 4 drams	half a dram	camomile tea ditto	camomile tea ditto	ditto	ditto	ditto	ditto
— compound do. . .	ditto . . .	ditto . . .	ditto thrice a day	ditto thrice a day	ditto	ditto	ditto	ditto
— cascarella . . .	1 to 3 drams	10 to 15 drops	water	water	astrigent & stomach.	astrigent & stomach.	gout	gout
— catechu . . .	1 to 2 drams	15 to 20 drops	mint water, 3 ti. a day	mint water, 3 ti. a day	stomachic	stomachic	purgings, relaxation	purgings, relaxation
— Columbo . . .	1 to 2 drams	10 to 20 drops	ditto	ditto	ditto	ditto,	indigestion, weakness, &c.	indigestion, weakness, &c.
— Peruvian bark . . .	2 to 4 drams	30 to 40 drops	ditto	ditto	ditto	ditto,	ditto,	ditto
— Huxham's do. . .	2 to 4 drams	30 to 40 drops	ditto	ditto	ditto, and cordial	ditto,	ditto,	ditto
— volatile do . . .	1 to 2 drams	10 to 20 drops	water,	ditto	ditto,	ditto,	ditto,	ditto
— iron muriated . . .	10 to 30 drops	3 to 6 drops	ditto	ditto	tonic	tonic	ditto, rickets, worms	ditto, rickets, worms
— gentian . . .	2 to 3 drams	12 to 30 drops	ditto	ditto	stomachic	stomachic	indigestion, flatulence	indigestion, flatulence
— guaiacum . . .	30 to 60 drops	5 to 6 drops	honey, twice a day	honey, twice a day	stimulant	stimulant	ditto, gleet, whites, &c.	ditto, gleet, whites, &c.
— ditto volatile . . .	1 to 3 drams	1 to 3 drops	water,	ditto	stimulant & sudorific	stimulant & sudorific	ditto, rheumatism, &c.	ditto, rheumatism, &c.
— Jalap . . .	2 to 4 drams	1 dram	mint water	mint water	brisk purgative	brisk purgative	obstinate costiveness	obstinate costiveness

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults:	Children, from 2 to 4 years.			
Tincture of lavend. comp.	30 to 80 drops	15 to 20 drops	water . . .	cordial . . .	lowness of spirits, fainting
— myrrh . . .	1 to 2 drams	10 to 15 drops	ditto, twice a day . . .	strengthening . . .	green sickness, debility, &c.
— Opium . . .	10 to 30 drops	3 to 5 drops	mint water . . .	anodyne . . .	spasms, acute pains, &c.
— — acetic . . .	20 to 40 drops	6 to 8 drops	ditto . . .	ditto . . .	ditto, coughs, asthmas, &c.
— Rhatania root . . .	2 to 4 drams	30 to 40 drops	ditto, three times a day . . .	stomachic . . .	indigestion, relaxation, &c.
— ditto, comp. . .	ditto . . .	ditto . . .	ditto . . .	ditto, and cordial . . .	ditto, ditto
Tobacco, extract of . . .	2 to 4 grains	$\frac{1}{2}$ to 1 grain	pill, twice a day . . .	anodyne . . .	hooping cough
Turpentine, Venice . . .	10 to 15 grains	. . . . .	honey, ditto . . .	diuretic, &c. . .	gleet, fluor albus, gravel
— —, spirit of . . .	15 to 20 drops	4 to 8 drops	ditto, ditto . . .	ditto . . .	ditto, gravel, rheumatism
Valerian powder . . .	20 to 30 grains	6 to 8 grains	mint water twice a day . . .	anti-nervous . . .	nervous head ach, &c.
Valerian, tincture of . . .	1 to 3 drams	10 to 30 drops	water thrice a day . . .	ditto . . .	ditto
— — volatile ditto . . .	40 to 80 drops	8 to 12 drops	ditto . . .	ditto . . .	lowness of spirits, &c.
Vitriol, acid elixir of . . .	8 to 12 drops	4 to 6 drops	camo. tea twice a day . . .	stomachic . . .	indiges.flatulence, relaxation
Vitriolic acid, diluted . . .	12 to 20 drops	7 to 10 drops	ditto . . .	ditto . . .	ditto, ditto
Wormwood, conserve of . . .	1 to 2 drams	$\frac{1}{2}$ to 1 dram	twice a day . . .	ditto, and vermifuge . . .	indigestion, worms, &c.
— — salt of . . .	5 to 8 grains	1 to 4 grains	mint water twice a day . . .	alkaline . . .	heartburn, rickets
Wine, antimonial . . .	2 to 4 drams	1 to 2 drams	water . . .	emetic . . .	. . .
— of Ipecacuan . . .	4 to 8 drams	2 to 3 drams	ditto . . .	ditto . . .	. . .
Rhubarb . . .	6 to 12 drams	2 to 3 drams	mint water . . .	aperient . . .	costiveness, indigestion
Steel . . .	3 to 6 drams	1 to 2 drams	ditto twice a day . . .	tonic . . .	debility, green sickn. whites

LIME WATER.

Directions for making.

Take of quick lime, four ounces; pure water, six pints. Mix, and set them aside in a covered earthen vessel for one hour, then pour off the clear water, and keep it in bottles well corked for use.

When weakness of the stomach is accompanied with acidity and flatulency, this water affords an excellent auxiliary vehicle, in the quantity of a wine-glassful, for taking the compound tincture of ginger and camomile, No. 7, or the aromatic tincture of rhatany root.

Lime water being capable of dissolving slime or mucus in the stomach and intestines, a redundancy of which affords a nidus or lodgment for worms, will considerably promote the efficacy of vermifuge medicines in the dose of a tea-cupful two or three times a day. (See Basilic Powder.) Lime water has been much celebrated as an alterative in scrofula and scurvy; in the latter case it has not supported its character, while in the former it has still its abettors. The good effects produced by it in such cases, probably arise from its destroying acidity in the stomach, and promoting digestion. In cases of violent purging, when the object is more to restrain than to stop it, Lime water will answer better than the chalk or cretaceous mixture. It may be given in the following form.

Take of lime water, six ounces; compound tincture of cardamoms, half an ounce; liquid laudanum, thirty drops; white sugar, a quarter of an ounce; mix. Two or three table-spoonfuls to be taken three or four times a day. The addition of a little lime water to milk, makes it sit easy on weak stomachs, and with this admixture, in the proportion of a table-spoonful to half a pint, invalids have been able to take milk, after it has disagreed in every other form.

BARLEY WATER.

Directions for making.

Take of pearl barley, two ounces: water, five pints; first wash the barley from the mealy matter that adheres to it with some cold water, then boil it a short time with half a pint of water to extract the colouring matter; throw this away, and put the barley thus purified into five pounds of boiling water, which is to be boiled down to one half, and strained for use.

The compound barley water, an excellent pectoral drink, is made in the following manner:

Take of barley water, prepared as above, two pints; figs sliced, two ounces; liquorice root sliced and bruised, half an ounce; raisins stoned, two ounces; distilled water, one pint; boil to two pints, and strain.

These liquors afford a very excellent diluting beverage in cases of acute diseases, the former in inflammatory fevers, and the latter in inflammatory attacks of the chest, as pleurisy and inflammation of the lungs, recent coughs, &c. As their efficacy depends on their free use, it is of consequence that they should be prepared so as to be elegant and agreeable to the palate; for this reason the directions above have been inserted in the London Dispensatory, and the several circumstances which contribute to their elegance particularized, as the previous washing of the barley, and extraction of its colouring matter.

The addition of a little lemon, or orange juice, or currant jelly, will take off the raw taste of barley water, and in most instances promote its efficacy. "However trivial medicines of this class may appear to be," observes that eminent physician Dr. Andrew Duncan, of Edinburgh, "they are of greater importance in the cure of acute diseases than many more elaborate preparations."

ALMOND EMULSION.

Directions for making.

Take of sweet almonds, six drachms; white sugar, two drachms; pure water, one pint; the almonds are to be first blanched by infusing them in boiling water, and afterwards peeling them. They are then to be well beat in a marble mortar, with the sugar, to a smooth pulp, when the water is to be added by degrees, and the rubbing continued till they are well blended, when the mixture should be passed through fine muslin for use. Great care should be taken that the almonds are free from any rancid taste.

Trifling as this emulsion may appear to be, it is the most valuable medicated beverage we possess, and in cases of strangury; inflammations of the lungs, bowels, kidneys, ureters, bladder, and urethra; pleurisy; recent coughs; and pulmonary consumption, is very superior to barley water or linseed tea. It may be taken in the same manner as directed for the preceding article (Barley Water).

For the coughs of children, and irritation in the bowels, arising from teething, or obstructed perspiration, this emul-

sion, with the compound tragacanth powder, in the proportion of a drachm to a pint, is an excellent drink, and in the quantity of twelve ounces, or a pint, in the course of the day, will nearly supply the place both of medicine and diet, for it not only quiets the system but also nourishes it.

OF THE RHATANY ROOT.

This root, the produce of Peru, has but lately been introduced into the practice of medicine in this country, although it appears, it has been long held in high estimation by the physicians in Spain, for its tonic or bracing powers. In its sensible qualities, it approaches nearer to the Peruvian bark than any other vegetable production we are acquainted with, and, by the testimonies of those physicians and surgeons who have given it a trial in this country, it appears by no means inferior in its medicinal properties, but in many respects very superior. It is more grateful to the palate and stomach than Peruvian bark, and hence, many patients have been able to persevere in its use that could not take Peruvian bark in any form.

In the cure of intermittents it has not been known to fail; and in several instances it has proved successful after the Peruvian bark, in full doses, had produced no effect.

On account of the grateful astringency of this root, the wine manufacturers in Portugal have long used it for the purpose of enriching Port wine; and, from the quantity used by them, it is not improbable that the medicinal property of that wine is principally derived from it.

From the success that has attended the exhibition of this medicine in my own practice, I can confidently assert, that it is a most valuable stomachic medicine, and very superior to any of the class of tonics. Since I introduced this root into practice, I have the satisfaction to learn from every quarter, that it merits the character I gave it in my treatise on its properties, &c. as well as in the last edition of this work.

In all diseases that require the use of a tonic medicine, the rhatany may be administered in the same manner as directed for the Peruvian bark; but as it is somewhat stronger, a less dose will suffice; fifteen grains of the powder may be considered equal to twenty of the best Peruvian bark.

Of this root, the same preparations are kept as of the Peruvian bark; viz. the powder, the extract, and the simple, aromatic, and compound tinctures; the directions for the use of which are given in the treatment of those diseases in which it may be employed with advantage.

OF INDIAN ARROW ROOT.

The Indian arrow root has, of late years, been cultivated in considerable quantities in gardens and provision-grounds in the West Indies. The following process for obtaining the fine powder, sold in this country, was communicated to me by a principal planter, for insertion in this work: "The roots, when a year old, are dug up, well washed in water, and beaten in a large wooden mortar to a pulp. It is then thrown into a large tub of clean water, well stirred, and the fibrous part wrung out by the hands and thrown away. The milky liquor being passed through a lawn sieve or coarse cloth, is suffered to settle, and the clear water drained off. The white mass left at the bottom is again mixed with clean water, and strained; lastly, the mass is dried on sheets in the sun for use."

This powder boiled in water forms a very pleasant transparent jelly, very superior to that of sago or tapioca, and is much recommended by Dr. Denman, Mr. Croft, and other eminent practitioners, as a nutritious diet for children and invalids. The jelly is made in the following manner: to a dessert-spoonful of the powder, add as much cold water as will make it into a paste, then pour on half a pint of boiling water, stir it briskly, and boil it a few minutes, when it will become a clear, smooth jelly; a little sugar and sherry wine may be added for debilitated adults, but for infants a drop or two of essence of caraway seeds or cinnamon is preferable, wine being very liable to become acid in the stomachs of infants, and disagree with the bowels. Fresh milk, either alone or diluted with water, may be substituted for the water. For very debilitated frames, and especially for rickety children, this jelly, blended with an animal jelly, as that of the stag's horn, affords a more nutritious diet than arrow root alone, which may be done in the following manner: boil half an ounce of the true stag's horn* shavings in in a pint of water for fifteen minutes, then strain, and add two dessert-spoonfuls of arrow root powder, previously well mixed with a tea-cupful of water, stir them briskly together and boil them for a few minutes. If the child should be much troubled

* Great care should be taken that the true stag's or hart's horn shavings be employed; as the shavings of the bleached bones of the calf, on account of being whiter and much cheaper, are generally sold for them. The latter do not impart so strong or wholesome a jelly as the stag's horn, the bones being nearly deprived of their glutinous property, by the process they undergo for the purpose of rendering them white.

with flatulency, from three to six drops of essence of caraway seeds, or a little grated nutmeg may be added; but for adults port wine or brandy will answer best.

Indeed by this diet, I am well persuaded many children have been reared, which, had they been kept to the breast and the customary spoon meat, would have died. One lady in particular that adopted it, has now two children living, in perfect good health, after having lost five either by convulsions or bowel complaints.

The combination of animal and vegetable jellies is much recommended by Dr. Cadogan in his popular treatise on the Management of Children; who justly attributes one-ninth of their diseases to being fed too much with vegetables. Such an admixture is similar to mother's milk, and probably very superior to the milk of an unhealthy woman.

Through the extravagant high price of six shillings a pound, at which this powder is sold, its consumption has been chiefly confined to opulent families. In order, however, that no class of invalids may be precluded from its use, I have directed it to be retailed at *four shillings* a pound, at the Chemical and Medical Hall, in Henrietta-street, Covent-garden; and as it is received in the original packages from one of the most respectable planters in the West Indies, I can take upon myself to say, that it is perfectly genuine, and equal, if not superior in quality, to that sold at double the price.

PREPARED CHARCOAL.

The properties of charcoal, as a dentifrice, were noticed in the first edition of this work, under the title of *Carbonic Powder*; since which it has been very generally employed for the purpose of cleaning the teeth.

Well calcined charcoal, reduced to a fine powder, is, no doubt, a very innocent and excellent tooth-powder. It gives the enamel a fine healthy white appearance, destroys the offensive effluvia rising from carious teeth, and will not only prevent caries of the enamel, but even arrest its progress after it has taken place; and it is worthy of remark, that people, who have been great sufferers by tooth-ach, have not experienced the least relapse after the regular use of this powder. It is likewise very efficacious in destroying unpleasant tastes in the mouth, and for cleaning the tongue in cases of putrid fever, sore throat, and indigestion. The charcoal, prepared from the Areca nut, has been held in high estimation among the Indians; and Dr. Lind, late of Bengal, states, that by its use he has preserved all his teeth perfectly sound, although now

arrived to the age of eighty: and several very respectable gentlemen who have resided many years in the East Indies, have assured me that it is esteemed a great preserver of the teeth, and a certain preventive against the tooth-ach. The charcoal of the Areca nut, (generally termed Betel nut in this country) certainly affords a more solid powder than that of wood, and therefore, for the purpose of cleaning the teeth, is more efficacious. It also possesses an alkalescency, which renders the matter that adheres to the teeth more readily removed by the brush; a property from which the common charcoal is entirely exempt.

On the very respectable authority of Dr. Lind, I was induced to give the Areca charcoal a trial; and, from long experience, I have no hesitation in recommending its adoption in preference to that of wood, particularly as it may now be procured with equal facility; Messrs. Pressey and Barclay, foreign merchants in Henrietta-street, Covent-garden, having, it appears, by the particular request of Dr. Lind and several families of distinction, imported the Areca nut expressly for the purpose of making the charcoal. I have also ordered it to be kept finely levigated at the Chemical and Medical Hall in Henrietta-street, Covent-garden.

It is become necessary to caution the public against the tooth powders recommended by many dentists, and particularly those sold by perfumers, which being composed of the most destructive minerals, may for a short time render the teeth white, but will ultimately prove very injurious by their mechanical action on the enamel. Indeed, such is the mischief that uniformly follows their use, that the introduction of the Areca charcoal into this country, may be considered a great desideratum, and, as soon as its valuable properties are known, it will no doubt be generally adopted.

The tincture of rhatany root, mixed with a little water, forms a very excellent astringent lotion for the teeth, and should always accompany the use of the prepared charcoal, or any other dentifrice. This tincture, from its peculiar astringent power, braces and strengthens the gums, and its repeated use has often succeeded in fastening loose teeth (See Tooth-ach).

Having examined the tooth-powder, industriously advertised by several druggists, under the name of *Prepared Charcoal*, I can assert, that I have not found any to be genuine charcoal powder, but a composition of burnt oyster-shells, which in no respect resembles charcoal, and as a dentifrice, must assuredly prove very hurtful. The spurious charcoal powder may be known by being of a grey colour, whereas true charcoal is perfectly black.

Under the head of Tooth-ach, some further directions are

given respecting the management of the teeth, and the principal causes of caries and tartareous concretions.

THE MEANS OF FUMIGATING INFECTED CHAMBERS, &c. AND PREVENTING THE PROGRESS OF CONTAGIOUS FEVERS.

For the important purpose of purifying the contaminated air of the wards and rooms of patients afflicted with contagious fevers, various means have been employed from the earliest period of medicine*. The acetic acid (vinegar) and different mineral acids have of late years been much used for this purpose, and ample experience has proved them to be efficacious. Dr. James Johnstone, of Worcester, in a dissertation on the malignant epidemical fever which prevailed in Kidderminster in 1756, asserts, that he found vinegar, sprinkled about the room when the weather was warm, and boiled with myrrh or camphor, effectually to correct putrid effluvia. "The steams arising from the latter," the Doctor asserts, "preserve the air from putrefaction, will insinuate themselves by the absorbent vessels of the lungs into the blood vessels, and greatly assist in impeding the progress of putrefaction in the fluids," &c. The camphorated acetic acid, No. 38, evaporated in a saucer over the blaze of a candle, is not only more commodious, but from the volatile nature and pungency of the acid, will have a more rapid action on contagious or putrid effluvia.

Citizen Guyton Morveau recommends the muriatic gas, which he found particularly efficacious in correcting the putrefaction of dead animal matter in the church of Dijon. For fumigating *uninhabited* rooms, the muriatic acid gas may answer much better than the steams of vinegar or nitrous gas; but as it considerably irritates the lungs, and is unfit for respiration, it is not proper for the apartments of the sick. Dr. Johnstone also recommends this gas in a slight degree; but on account of its being unpleasant for respiration, he preferred the employment of vinegar†.

* Hippocrates, upwards of two thousand years ago, directed herbs and nitre to be boiled in vinegar in the chambers of the sick.

† The evaporation of vinegar in the rooms of the sick was a common practice in this country, long anterior to Dr. Johnstone's publication; but it appears that the Doctor was the first who employed the muriatic acid gas, although citizen Guyton Morveau, in his publication, claims the priority of the discovery. Citizen Guyton, however, did not use it till the year 1773; whereas it is recommended by Dr. Johnstone in his dissertation published in 1758.

For disengaging the muriatic acid gas, citizen Guyton Moreau gives the following directions:—"Put into the middle of the place which is to be purified, a chaffing dish, on which a pan half filled with sand and ashes is to be laid, on which a glass or earthen bowl, containing common salt, is to be placed; the sand being heated, pour on the salt, at once, vitriolic acid, and retire immediately—the windows and doors should be exactly shut. The proportion for a high and spacious ward, containing twenty beds, is, of common salt, nine ounces six drachms, and of vitriolic acid, seven ounces seven drachms (by weight), which quantities are to be augmented or diminished according to the space of the room to be purified." Inhabited rooms, this author recommends to be fumigated with the oxygenated muriatic acid, which is made by adding black oxide of manganese in the following proportion:—Take of common salt, two parts; black oxide of manganese, one part; vitriolic acid, two parts: after rubbing the salt and manganese together in a glass mortar, place the mixture in an open glass vessel in the infected chamber, and pour on it the vitriolic acid. The fumes are immediately exhaled and diffused through the atmosphere of the room, and effectually destroys putrid particles or contagious matter.

The nitrous acid gas is preferred by Dr. James Carmichael Smyth, who directs it to be used in the following manner:—"Take fine sand and heat it in an iron ladle or shovel; when made very hot, fill with it an earthen quart pipkin, in which immerse a common tea-cup, containing about half an ounce of vitriolic acid, to which, when it has acquired a small degree of heat, gradually add the same quantity of purified nitre in powder; stir the mixture with a slip of glass until the vapour arise in considerable quantity. The pipkin is then to be carried about the room (the doors, windows, &c. being closely shut,) occasionally putting it under the bed and in every corner and place where any foul air may be supposed to lodge: the fumigation to be continued till the room be filled with the vapour, which will appear like a thick haze."

In very malignant cases it should be repeated twice a day; but otherwise, once will be sufficient; which should be regularly continued for some days after the contagion is supposed to be destroyed. If the vapour irritates the lungs, so as to excite much cough, fresh air should be admitted, by opening the doors or windows of the room. After a few repetitions, this effect will not, however, be produced; but, on the contrary, it will be found agreeable and refreshing. It must be particularly remembered that no wood or metal should be employed in the process, otherwise *dangerous* and *offensive* vapours will be disengaged with the nitrous. Proper attention should likewise be paid to cleanliness in the apartments, clothes, and bedding.

The nitrous vapours thus disengaged, not only destroy the subtile infectious particles arising from putrid bodies, or from persons labouring under contagious fevers, as effectually as the muriatic gas recommended by citizen Guyton Morveau, but also communicate to the atmosphere an animating principle, which, by respiration, enters the system in such quantity, as evidently to invigorate the vital powers, and cheer the mind, and thus prove more beneficial than medical men are generally aware of. The oxygenated muriatic acid of citizen Guyton has a similar effect, and was preferred by Mr. Cruickshank, on the supposition of its being more efficacious, as well as more pleasant to respire.

In order more effectually to resist the effects, and check the progress of infection, the following rules, suggested by Dr. Disney Alexander, should be particularly enforced. Similar instructions are given in a work, entitled "Medical Ethics," by Dr. Percival: and by Dr. Thorp, physician to the infirmary at Leeds.

1st, None should be permitted to visit patients labouring under infectious disorders, but those who are impelled by the calls of duty, affection, or necessary business.

2dly, None should be admitted *fasting* or *before* breakfast. The afternoon is the fittest part of the day for visits of this kind; or if they must be paid in the morning, a glass or two of Port or Madeira, or a dose of compound tincture of bark, or rhatany root, ought previously to be drank. A handkerchief sprinkled with camphorated acetic acid, held occasionally to the nose, is also an useful precaution to those who visit infected persons. Smoking may also be of some service.

3dly, The utmost attention to *cleanliness* in *every thing* relative to the patient, should be observed. This is particularly requisite in camps, hospitals, poor houses, gaols, &c. The frequent change of linen, and the *immediate removal* of every thing of an *offensive nature* are absolutely necessary.

4thly, The free admission of *pure atmospheric air** is indis-

* The atmosphere is not, as was formerly supposed, a simple elementary body, but is found to consist of two very different kinds of air, the one eminently conducive to the purposes of life, named oxygen; the other, which is nearly three-fourths of the whole, destructive of life, and called azote. On a due admixture of these two component parts of the atmosphere, depends not only respiration but the colour and circulation of the blood, and all the phenomena of life. And since in these cases the air is always more or less contaminated with the breath, excrements, and perspiration, of the patient, the oxygenous, or pure part of it, being diminished, in proportion as the azotic, or irrespirable part, is increased;

pensably requisite. The absolute necessity for this caution is strikingly evinced by what is recorded to have happened at Philadelphia, in the yellow fever of 1793. Of 2000 persons who were removed to tents erected in the fields, only 17 died in 25 days: whilst out of an equal number in the city, 178 perished.

5thly, Attention ought to be paid to the *temperature* of the air. *Extreme heat* might increase the tendency to putrefaction, which exists in a greater or lesser degree in most infectious disorders. *Extreme cold*, on the other hand, is not only very ungrateful to the feelings of the sick, but by its debilitating property, may increase the virulence, and extend the ravages of contagion.

6thly, When a person dies from an infectious distemper, the body should be removed, where this can be accomplished, *as soon as possible*, into a room *appropriated to that use*: it should be then wrapped in a pitched cloth, and the friends of the deceased should be desired to proceed to interment, as early as is consistent with propriety. Early burial was so much enforced during the plague at Marseilles, that Dr. Arbuthnot, in his treatise on air, asserts that it was clearly ascertained many were buried alive; a body apparently dead should not, therefore, be too hastily consigned to the grave, the natural heat and pure air of the earth being very powerful agents in restoring the vital functions, in case of their suspension.

7thly, As infection is liable to be communicated by clothes which have been worn by the sick, such clothes ought not to be used, until they have been well washed, and thoroughly fumigated.

8thly, After the recovery or decease of a person labouring under an infectious fever, the roof or walls of the apartment in which he lay ought to be white-washed, the windows kept open during the day, and flowers or herbs inverted in water, placed in such parts of the room as are more immediately exposed to the action of the sun's rays upon them*.

in order to remedy this effect, the apartments of the sick are artificially supplied with this vital, or oxygenous principle, by the means already suggested.

* Whilst Dr. Priestley was engaged in a series of experiments to enable him to purify contaminated air, he discovered that vegetables answered this purpose most effectually. The experiment by which he illustrates the fact is this: having rendered a quantity of air very noxious, by mice breathing and dying in it, he divided it into two receivers inverted in water, introducing a sprig of mint into one of them, and keeping the other receiver with the contaminated air in it alone. He

9thly, The establishment of fever wards, or houses of recovery, for the reception of persons attacked with infectious fevers, is an institution which reflects immortal honour on its founders and is better adapted to check the ravages and prevent the recurrence of these maladies in large towns, than perhaps any other plan which has hitherto been devised.

It is worthy remark, that many very respectable practitioners in the West Indies as well as on the continent of America, deny that the fevers which, at times, have proved so destructive in those places, were contagious; and Dr. John Vaughan, after investigating the cause and nature of the fever which prevailed with such violence in the borough of Wilmington, in North America, in the year 1802, concludes, contrary to the general opinion, that the disease was not imported, that it was not contagious, but that it depended upon some noxious state of the atmosphere, owing to certain putrid effluvia, which formed a constituent part of heavy fogs, that used to collect in the evening, and be suspended over the flats during the nights. Hence we find that fevers which are attributed to contagion, will make an equal by rapid progress where guards have been placed, as they have been in Russia, and where high walls have been built to prevent communication; and some instances have happened of a great part of Europe, and some of Asia, Africa, and America, suffering from similar complaints nearly at the same time, from a very widely spreading noxious effluvia in the air. Dr. Desgenette, physician to the French army in Egypt, and M. Assalini and Larray, having endeavoured to communicate the plague by infection without effect, were led to believe that the plague is not contagious; but such experiments are by no means satisfactory, for in all cases of infection, a certain state of constitution must exist to render the person susceptible of its action; hence those whose systems are perfectly healthy, or, as is technically termed, *not predis-*

found about eight or nine days after, that the air of the receiver into which he had introduced the sprig of mint, had become respirable; for a mouse lived very well in this, but died immediately upon being introduced into the other receiver, containing the contaminated air alone. All strongly scented objects vitiate the air; and it has been satisfactorily proved by the experiments of Ingenhouz, Priestley, and others, that most plants emit during the night a large proportion of azotic or irrespirable gas; it is on this account that flowers suffered to remain all night in a bed-room, sometimes prove very deleterious in their effects. Nor is it less unhealthy to sleep in a room where a quantity of green fruit is constantly kept, as from its fragrance a portion of inflammable matter transpires, which soon impregnates the air.

posed to receive the contagion, may expose themselves to its influence with impunity.

The partial appearances of this fever, and its frequent occurrence at the same places, have induced some practitioners to suppose that it was produced by noxious vapours, or putrid miasmata disengaged from the earth. The French historian Mezeray, as quoted by the Hon. Mr Boyle, states, "that a vapour broke out of the earth in the kingdom of Cathay, that caused fevers more fatal and universal than were ever before known, and that it consumed every thing before it, even the trees and stones." Hoffman, Sennertus, and many of the most respectable ancient physicians, have very justly observed, that the *fear** of contagion, under a *bad constitution of the air*, has been more productive of disease than the air itself, and it is to be feared, has been the cause of many unfortunate sufferers being lost for want of proper attention, and some even being buried alive.

Whatever the original source or nature of the contagion may be, after it enters the circulation, which is probably by respiration, like other specific poisons, it evidently generates a quantity in the system, which by passing off by perspiration, contaminates the air; the means therefore recommended for purifying the air and ventilating the chamber, must considerably tend, not only to check its progress, but also to diminish its malignancy. (See Typhus Fever.)

THE MEANS OF COUNTERACTING THE EFFECTS OF THE DIFFERENT POISONS ON THE HUMAN BODY.

Poisons may be considered under three different heads, viz. *mineral, vegetable, and animal*.

OF THE MINERAL POISONS.

Arsenic is the most powerful, and therefore for the purpose of destroying life is generally employed. The solutions of

* A remarkable instance of the influence of the depressing passions, in this respect, has been lately noticed by Captain Philip Beaver, in a work entitled "African Memoranda." This intelligent author, speaking of the disease which prevailed among his men at Bulama, observes, "It is melancholy, no doubt, but many have absolutely died through fear. More courage and greater exertions, I firmly believe, would have saved many of them; but a lowness of spirits, a general despondency, seems to possess every body. When taken ill; they lie down, and say they know they shall die; and what is very remarkable, I have never yet known one recover after having, in such a manner, given himself up."

mercury, copper, lead, and antimony, in different acids, are likewise, in no great quantity, active poisons. To counteract the effects of any of the mineral poisons taken into the stomach, the liver of sulphur is the most efficacious medicine, which may be administered in the following manner: dissolve a large table-spoonful of the liver of sulphur in a pint of warm water, and give the patient two table-spoonfuls of the solution as soon as possible, and repeat it every ten or fifteen minutes for three or four doses, or as occasion may require. If this preparation cannot be readily procured, a tea-spoonful of sulphur, with eight or ten grains of salt of wormwood, will afford the best substitute.

Either the liver of sulphur, or salt of wormwood, by uniting with the acid of corrosive sublimate of mercury and the metallic salts, decomposes them, and precipitates the metal in the form of a calx, nearly or wholly inactive. It will likewise be proper to dilute plentifully with warm water, and to excite vomiting, by giving, with the first dose of either of the above medicines, or as soon after as possible, two scruples of ipecacuan powder, and to hasten its operation by irritating the fauces with the finger or a feather. Oil and milk may likewise be given with a view to blunt its acrimony. If neither liver of sulphur nor salt of wormwood can be readily procured, ten grains of pearl or pot-ash may be employed, or half a table-spoonful of soap lees given in a little water, or a strong solution of soap in water.

In all cases of mineral poisons* this method should be adopted. If the poison should be arsenic, the alkaline medicines, as the liver of sulphur, salt of wormwood, or pearl-ash, will very plentifully dissolve it, and hence it will be the better dissipated by emetics.

As in cases of mineral poisons, what is to be done must be done speedily; it must be remembered, the most powerful medicine for counteracting their effects, is the *liver of sulphur*, given in a dose of twenty grains, dissolved in a glass of water, and repeated in a quarter of an hour, or in the manner above mentioned; and that when this preparation cannot be obtained, the salt of wormwood, or soap lees with or without flowers of sulphur are the best substitutes for it. (See Flowers of Sulphur.)

* When the patient refuses to give any account of the poison, which is too often the case, it will be advisable to treat it as belonging to the mineral class, in order to avoid a loss of time, which, with the emetic of ipecacuan, will also succeed in expelling it, should it be of the vegetable kind,

It is strange such powerful medicines in counteracting the effects of mineral poisons, should not have been noticed by Tissot, Buchan, and others who have written on the subject, professedly for public instruction. Dr. Buchan merely recommends oily drinks to be taken, and observes, if they fail to produce vomiting, "half a drachm of powder of ipecacuan must be given, or a few spoonfuls of the oxymel, or vinegar of squills may be mixed with the water he drinks." The two latter articles, no medical man, at least of any chemical knowledge, would think of employing, being more likely to increase than diminish the virulence of the poison. With respect to mineral poisons, there is a rational ground for hope, as by proper management they may be decomposed, their effects counteracted, and the danger resulting from their exhibition guarded against and prevented;" but the

VEGETABLE POISONS

Do not admit of such a remedy, there being no means of rendering them inert by decomposition. Their speedy evacuation should, therefore, be attempted by the most powerful emetics; as ten or fifteen grains of white vitriol, or four grains of emetic tartar, No. 35, with thirty of ipecacuan powder, No. 23, in a little water.

The sooner the emetic is administered, the greater is the probability of success, for such is the narcotic property of vegetable poisons, that in a short time they will so far destroy the sensibility of the stomach, and produce such a degree of spasm, as to render vomiting impracticable; their evacuation cannot then be effected, and their continuance is inevitably fatal. If an emetic medicine cannot be readily procured, attempts should be made to excite vomiting by forcing a quantity of warm water into the stomach, and afterwards by irritating the fauces, by introducing a finger or a feather into the mouth, till the contents of the stomach are thrown up, which will often prove effectual. The vegetable acids, being considered by many practitioners anti-narcotics, may likewise be administered; vinegar, being the most handy, and no doubt, as efficacious as any, may be given in the quantity of three or four table-spoonfuls. The patient should likewise be made to drink plentifully of warm water, or a strong infusion of coffee, the latter of which some experienced practitioners assert to be the most efficacious remedy that can be employed for the restoration of the sensibility of the stomach, and the removal of the spasms induced by vegetable poisons.

If the poison be an over-dose of opium, the patient should be prevented from going to sleep by shaking him, and applying

some pungent smelling salts to the nostrils, while the above means are employed for its evacuation from the stomach. The propriety of bleeding, recommended by Dr. Buchan in such cases, is much to be doubted: no advantage can be derived from such a practice, but as tending to diminish the powers of life—it would probably accelerate its fatal effects.

OF ANIMAL POISONS.

The effects of poison introduced by the sting of insects may be prevented, by applying, immediately, a little vinegar and spirit of wine, by means of some folds of old linen.

From the bite of a mad animal arises the most dreadful disease known in this country, termed *Hydrophobia**; for the prevention and cure of which a great variety of nostrums have been held forth to the public; but there is no satisfactory instance of any of them having proved useful; and no means yet suggested can be depended on, but the complete removal of the injured part by the knife or actual cautery. In this all medical writers on the subject agree, with this difference, that some contend it can only be effectual when it is done in a few hours; while others, as Dr. Cullen, &c. are of opinion that the poisonous matter is *not immediately* absorbed into the system, and think the measures for destroying the part may be practised with success many days after the bite.

Mr. Hugh Munro, and Mr. Benjamin Bell, recommend the removal of the part as soon as possible after the accident; but observe, if it has been neglected, it should be attempted at any time before symptoms of hydrophobia take place, as there are instances of no alarming symptom occurring for several weeks after the bite has been received.

Sea bathing has been much recommended in all ages as a preventive; and lately mercury by many eminent practitioners; but there are no well-attested cases in which they have been attended with advantage, so that little or no dependance can be placed on them. The complete cutting out of the part to which the teeth have been applied is unquestionably the most

* Dr. Berguillon, a French physician of repute, has lately published a treatise, in which he maintains, with great ingenuity, that this disease is produced *solely* by the power of imagination, without the intervention of any distinct, material poison. This opinion has since been broached by several practitioners in England—but if the disease be communicated from one dog to another, or from a dog to a pig, a horse, or any other animal, of which there cannot be a doubt, surely it cannot be said to be imaginary.—“*Est natura hominum novitatis avida.*”

to be relied on: and as hydrophobia, when once it has taken place, is so generally fatal, and the period for absorption uncertain, the sooner the excision of the part is accomplished the greater will be the chance of success. Till the operation can be done, the part should be constantly washed; and even after its removal, a discharge should be kept up from the surface of the wound by stimulating applications of basilicon ointment, with red precipitate of mercury, or spirit of turpentine.

The preventive medicine, so much extolled by Dr. Mead, is composed of ash-coloured liverwort, powdered, half an ounce; black pepper, powdered, quarter of an ounce; to be mixed well together, and divided into four doses, one to be taken every morning fasting, for four mornings successively, in half an English pint of cow's milk, warm.

"After these four doses are taken (the Doctor observes), the patient must go into the cold bath, or a cold spring or river, every morning fasting, for a month; he must be dipped all over, but not stay in (with his head above water) longer than half a minute, if the water be very cold; after this he must go in for three times a week, or a fortnight longer. The person must be bled before he uses the medicine."

In the space of thirty years, the Doctor asserts, that he had an opportunity of giving this plan a trial no less than *one thousand times*, with (as he observes) *uniform success!!* No experienced practitioner, however, I am persuaded, will attribute to it any antidotal power whatever, or think of employing it to the exclusion of more rational remedies. If mercury be applied, it must be used both internally and externally, so as to excite salivation as soon as possible. Two drachms of the strongest mercurial ointment at least, should be rubbed into the inside of the thighs and the part surrounding the wound, two or three times a day, and a pill, composed of three grains of calomel, with a grain of opium taken twice a day. If symptoms of hydrophobia* should occur, a vein should be opened in the arm, and the blood suffered to flow till the patient faints. This practice has, in some instances, succeeded, and is by far the most rational. If the patient has the power of swallowing, two grains of the sugar of lead, in a little water, may be given every two hours, or made into a pill with conserve of roses. (See Hydrophobia.)

* It is thus named, because the person dreads the sight or falling of water.

OF SUSPENDED ANIMATION, AND THE MEANS OF RECOVERY.

The suspension of the vital powers, produced by immersion in water, called drowning, and that by strangulation and suffocation by noxious vapours* and lightning, are very similar, and require the same resuscitative means. As in poisons, so in cases of suspended animation, what is necessary to be done should be done *quickly*: therefore, on the *first alarm* of any person being drowned or suffocated, while the body is searching for, or conveying to the nearest house, the following articles should be got ready, viz. *warm blankets, flannels, a large furnace of warm water, heated bricks, a pair of bellows, warming pan, sal volatile, clyster pipes, and an electrifying machine.* In conveying the body to the house, the head and chest should be placed rather in a reclining position, that in case any water should have got into the lungs it may run out at the mouth, which the slight agitation occasioned by carrying the body will accelerate. The head, however, should not be kept much lower than the shoulders, or even in a reclining position, many minutes, otherwise the blood will gravitate in such quantity into the vessels of the head, as very considerably to impede the restoration of life by compressing the brain.

* The unhappy incidents that occur on the opening of subterraneous places, such as tombs, cellars, vaults, &c. are produced by the quantity of fixed air contained in them, which, being unfit for respiration, occasions immediate suffocation. The air is considerably heavier than common air, hence it occupies the lowest situations, such as wells, caverns, &c. From the famous lake of Averno, where Virgil placed the entrance of hell, this air is exhaled in so large a quantity, that birds cannot fly over it with impunity. Before a person enters a vault or cell that has been for some time shut up, or descends a well, the experiment should be made whether a candle will burn in the atmosphere of the place; for ignition and respiration are so very similar, that the same air that will support the one will also the other. The best method of rendering the air of such places fit for respiration, is to explode in it some gunpowder, in proportion to the size of the place; for this purpose the fire-works named bomb and cracker, will answer best, as they may be thrown to the bottom of the well, or end of the vault, &c. To purify the air of the vaults at Dijon, M. Morveau threw in bottles of muriatic acid, with such force, that the bottles might be broke, and the acid spilt in the place; but this experiment was made to correct putrid effluvia, and not fixed air. If nitric acid were employed in the same manner, it would not only destroy putrid effluvia, but render fixed air fit for respiration, by disengaging a quantity of vital air.

The body being placed on warm blankets, in a *spacious* room with a good fire, and only five or six attendants, the *first* attempt* should be to restore its *heat* and the *circulation* of the blood, by friction with warm flannels, and by placing bladders, filled with warm water, to the pit of the stomach, and soles of the feet. Ether and other spirits, recommended by the Humane Society, for external applications, are *very hurtful*; the degree of cold produced by their evaporation† counteracting the effects of friction.

The restoration of the important functions of the lungs,‡ should be attempted by forcing air from a bellows through one nostril§; the other and the mouth being kept *closely* shut, an assistant should *gently* press down the ribs, as soon as their elevation indicates a distention of the lungs, and this alternate inflation and compression should be continued some time, so as to imitate natural respiration: the friction of the body, &c. being still continued by the other assistants.

The action of the heart should be excited by passing through its region gentle electric shocks, from the left to the right side, and from the front to the back alternately.

* If the suspension be occasioned by noxious vapours taken into the lungs, the first object must be their expulsion, by compressing the ribs and bowels so as to press up the diaphragm. The air will be thus in a great measure expelled, and on removing the pressure, the atmospheric air will rush into the lungs, when the heart generally begins to flutter, and life gradually to return.

† It is a well known fact, that an animal may be frozen to death by sprinkling ether over the surface of the body; its rapid evaporation carrying off the vital heat.

‡ Dr. Cullen, in a letter to Lord Cathcart on the subject of suspended animation, says, that very often the water does not enter the lungs in any material quantity, and that death ensues in consequence of the stoppage of respiration, and the consequent ceasing of the action of the heart, whereby the body loses its heat and vital principle. Mr. Hunter, in the Philosophical Transactions, Vol. XLVI. advances the same theory, and asserts, that the restoration of breathing is all that is necessary to restore the heart's motion.

§ During this process, it will be proper to draw the tongue forward, in order to elevate the epiglottis, which, by opening the larynx, will facilitate the admission of air into the lungs. If this be neglected, the air will be more likely to pass down the gullet into the stomach, the distention of which, by forcing up the diaphragm, will, in some degree, elevate the chest, and thus deceive the attendant by giving the appearance of the air having entered the lungs. Great care, however, should be taken, that the air does not escape through the mouth instead of passing into the lungs, on account of the drawing forward of the tongue.

The bowels should be fomented and stimulated, by throwing up a quantity of warm water, with a handful of common salt dissolved in it, which may be done with a clyster-pipe and bladder. The injection of tobacco fumes up the fundament, recommended by the Humane Society, from the *narcotic* quality of the herb, is more likely to prove hurtful than otherwise. It is strange, a herb, noted for its extraordinary effects in *diminishing* the vital functions, should be proposed as a *stimulant* in cases of their suspension*.

A slight agitation of the body every six or ten minutes, will act as a great auxiliary to those means.

Bleeding having a tendency to weaken the force of the circulation more than promote it, should be employed only when deemed necessary by a medical practitioner. When, however, there is an evident congestion of blood in the vessels of the head, which is generally produced by strangulation, the opening of the temporal artery will prove very beneficial, and should not be delayed.

The brain and nervous system may be stimulated by applying electric sparks to the head and surface of the body†.

On the appearance of any symptom of returning life, a teaspoonful of sal volatile, or a table-spoonful of warm brandy, should be got into the stomach, either at once, or by small quantities frequently repeated.

If, after a *vigorous* employment of these means for the course of *two hours*, there should be *no* symptom of returning life, and any brewhouse or warm bath can be obtained, the body should be carefully conveyed to such a place, and remain in the bath, or surrounded with warm grains or ashes ‡ for three

* The fumes of tobacco thus administered in cases of spasmodic affections of the bowels and strangulated rupture, I have known, in many instances, to destroy life in a few hours.

† I was, some time since, successful in restoring a poor woman, who had unfortunately slipped off a plank into the Thames, and from the information I could obtain, she was under water for nearly half an hour. Being fortunately on the spot, the methods above suggested were immediately employed. The case (Mrs. Bloxam, of Bankside) was published by Dr. Hawes, in the reports of the Humane Society, and the anniversary meeting adjudged me the honorary medallion.

‡ Tissot mentions an instance of a young girl who was restored to life after she was taken out of the water, to all appearance dead, by laying her naked body in hot ashes; after remaining in that situation for half an hour, the pulse returned, and she soon afterwards recovered speech. This author also relates the case of a man who was restored to life after he had remained *six hours* under water, by the heat of a dung-hill!!

or four hours : but if not, the plan proposed should be *persisted* in for an hour or two longer, there being instances of lives having been restored after *three hours* unremitting perseverance.

If the subject be very young, it may be placed between two healthy persons in a bed; the natural vital warmth has in this manner proved, in many cases, successful.

The apparatus for inflating the lungs, and the drag, recommended by the Humane Society, should be more generally kept at public or farm-houses, near to rivers and canals, many lives being lost for want of the latter particularly.

The means recommended for the recovery of drowned people are equally applicable to a number of cases where the vital functions appear to be *only suspended*, such as convulsive and fainting fits, suffocation from noxious vapours, and spasmodic affections of the lungs, strangling, intense cold, blows or falls, &c. &c. Through their being neglected, from the supposition that the person is really dead, there is little doubt but that the principles of life have been revived by the heat and pure air of the earth after interment.

TREATMENT OF A FIT OF INTOXICATION.

Different acids have been recommended for the purpose of correcting the intoxicating power of spirituous and vinous liquors, but the salutary effects that follow their use is probably produced by the diluting liquor administered with them. The recovery of a person in a fit of intoxication must chiefly depend on evacuating the stomach, which is best done by forcing down a quantity of lukewarm water, and provoking vomiting by irritating the fauces with the finger or a feather. If the person has so far lost the powers of sense and motion as to be unable to help himself, he ought to be placed in an arm chair that will secure him from falling, and the neckcloth and collar of the shirt immediately loosened. The doors and windows of the room should be thrown open to admit of a free ventilation, and all visitors, except assistants, excluded, and whatever may add to the heat of the body should be carefully avoided.

An horizontal position, as lying on the floor or bed, favouring the influx of blood into the vessels of the brain, should be avoided if possible. In case the person cannot be kept in a chair, the head and chest should be elevated by pillows, and the body inclined a little to one side for the purpose of rendering vomiting more easy. If the face be *much* swelled, and *unusually* flushed or bloated, the breathing *laborious*, the eyes *fixed* and their blood-vessels *distended*, the danger of apoplexy

may be apprehended; to avert which it will be necessary to extract blood from the *temporal artery*, to put the feet in *warm water*, and administer an *acid* glyster of common salt and gruel, and to use every means to *provoke vomiting**. Throughout the whole paroxysm the application of vinegar, spirit of wine, or ether, to the temples and front and back part of the head is very serviceable; the cold produced by the evaporation, checks the determination of blood to the head, and moderates the heat and velocity of the circulation in the brain. The common application of pungent smelling-salts, or spirit of hartshorn to the nostrils, by stimulating the brain, is in this case improper.

People often lose their lives in a fit of intoxication by falling down in an unfavourable posture, in consequence of an inability to conduct themselves; the head being bent under the body, the return of blood is in a great measure prevented, and respiration obstructed or totally stopped, and by continuing in this situation the living principle is soon extinguished. It is to be suspected that most of the travellers, who perish among snow, are of this description; fool-hardy under the false courage of dram drinking, they sally out in the dark to explore their way, and quickly lose the road from the change of objects which falling snow occasions. The effects of the dram, in this situation of distress, accelerate death, by assisting to bring on drowsiness or sleep, which exposes the body to the action of cold, and the unfortunate traveller soon sleeps "ne'er to wake again."

The resuscitative means already recommended for the recovery of drowned people, should have a fair trial before a body so found be pronounced dead, as it is impossible to say, under such circumstances, what time has elapsed since he *last breathed*; for although the limbs may be cold and stiff, the heart may still remain so warm and excitable, that on restoring heat to the body by friction, and inflating the lungs, the vital functions may again be put into motion. The body should

* Vomiting, under an impending apoplexy, has been considered a dangerous practice by some *inexperienced* physicians; I have long made the observation, that *spontaneous vomiting* is a *certain* relief when there is every sign of instant apoplexy; it is, therefore, fair to imitate nature, which ample experience fully justifies. Indeed, those practitioners who have cavilled most at this practice, have produced no fact to controvert it, their dislike resting *solely* on *theoretic* opinions. To these opinions, fortunately, the operations of nature do not bend, for if we are to suppose it dangerous to evacuate the loaded stomach of the inebriate, vomiting, at any time, must be considered an operation not only inexpedient, but to a *certain* hurtful.

not, however, be *suddenly* exposed to the heat of the fire, or put into warm water, till there are no hopes of recovery by the other means.

THE MEANS OF STOPPING A FLOW OF BLOOD FROM WOUNDED LIMBS, &c.

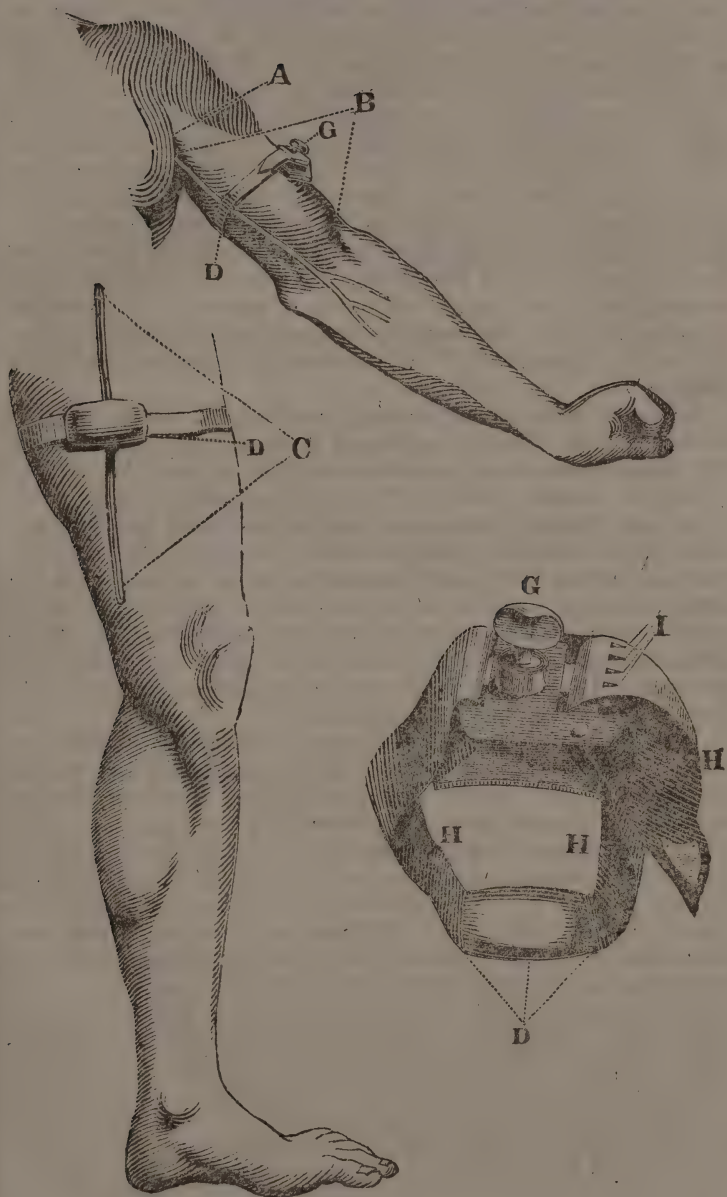
In all cases of divided arteries of the extremities, the first object is to prevent the loss of blood, by compressing the trunk of the vessels *above* the wound, till surgical aid can be obtained. For this purpose, an instrument is generally employed termed *tourniquet*; which, when skilfully applied, never fails immediately to suppress the bleeding. Many instruments of this kind have been recommended by surgeons of reputation, but that invented by Mr. Savigny, an ingenious surgeons' instrument maker in London, is not only more simple, but more effectual in its application.

In order to render the use of this instrument more familiar, I have given an engraving which represents it *on* and *off* the limb, and also the course of the arteries of the arm and thigh.

The artery of the upper extremity, or arm, proceeds from the trunk at A, in the following manner: the trunk passes into the arm-pit, *deeply situated*, then proceeds along the inward part of the arm, *obliquely* towards the fore-part of the joint of the elbow, and here divides into three branches; in this course to its division it lies *near to the bone*, and therefore, admits of being more successfully compressed. The situation of this trunk is described in the plate by the lines B. The compression for preventing the flow of blood from divided arteries of the upper extremity, whether above the elbow, or of the hand, must therefore be made in some part of the course of the trunk of the artery expressed by the lines B, between the arm-pit and the bend of the arm.

The distribution of the vessels of the *lower* extremity is thus; the artery passes from the cavity of the belly to the groin, where, in *thin* people, the pulsation of it may be felt. Here, in cases of a wound and effusion of blood *very high up* in the thigh, effectual compression may be made by the fingers, or a strong pad, or firm body, pressed *very strongly*.

From the groin the artery proceeds in an *oblique* direction downwards and inwards as expressed by the line C; and about the middle of the inside of the thigh, expressed by the compress D, it lies close to the bone, which, of course, is the most favourable part for making a pressure on it, because of the resistance of the thigh bone; and when the wound is in any part *below* it, this is the place which surgeons fix on for the applica-



tion of the *pad* of the *tourniquet*. The course of the vessel is then *downwards* and *backwards* to the ham; in the *hollow* of which, against the lower flat part of the thigh bone, the compression may be very successfully made in all cases of wounds or operations below the knee joint; but, *beyond* this part, compression must not be depended on, for immediately below the joint, the artery divides, like that of the upper extremity, into three vessels, which are situated *between* the bones of the leg.

In using the *tourniquet*, great care must be taken that the *pad*, D, be applied over the artery and the instrument itself as nearly opposite to it as possible. The bandage, H, is then to be conducted round the limb, passed through the opening of the instrument *behind* the roller, drawn over it very tight, and secured by fixing it on the three steel points, I; in most instances, this will be found sufficient, but if it should not, a few turns of the screw, G, will effectually complete the intention.

The *pad*, or compress, is not, in all cases, necessary, and, even when the discharge of blood is considerable, if there be any doubt about the exact place to which it should be applied, it may be omitted entirely. The circular bandage, when made tight, will effectually compress both the trunk and the collateral branches of the artery; and, therefore, many surgeons consider the *pad* useless. When it happens not to be applied over the artery, but on one side of it, the compress may prevent the compression of the artery by the circular bandage, in consequence of which, the blood will continue to flow. Such a circumstance I have known happen during the amputation of a limb at one of the London hospitals.

If the wound be in the head, or trunk of the body, the most effectual and easiest method of applying pressure, is by means of dossels of lint, or soft linen, held *firmly* upon the divided ends of the vessels, or over the wound, by the fingers.

The *tourniquet* is only employed in case of the division of any of the vessels which convey the blood *from* the heart, termed *arteries*. In consequence of the power with which the blood is propelled through this system of vessels, it happens, that when they are wounded, the blood flows *rapidly* and *in jerks* from the wounded part.

The vessels by which the blood is returned to the heart, are called *veins*. The blood in them receives but little of the impelling force of the heart, and therefore moves not with a strong tide or current, but glides *evenly* and *gently* on: hence wounds of these vessels are of very little importance, a small degree of pressure by a finger, or a dossel of lint, or some folded linen, upon the wounded part, will effectually stop the bleeding. The same will be sufficient in cases of divided

arteries, when the vessels are small, or when a tourniquet or bandage is not at hand.

Agaric, and other fungous substances, and preparations of iron and the mineral acids, have been much extolled for stopping the bleeding of wounds: their astringent effects, if any they produce, are very temporary, and are *always* productive of mischief, by irritating the wound, and preventing the union of its edges, or what is termed, its healing on the first intention.

The same may be said of Friar's, or Turlington's balsam, tincture of myrrh, &c.

Sir William Blizard, surgeon to the London hospital, recommends the tourniquet to be kept in every family; and observes, that he has known many lives to have been lost for the want of one.

OF PHLEBOTOMY, OR BLOOD-LETTING.

This operation of bleeding being so frequently performed by farriers and barbers, it is generally regarded by the public as trivial with respect to its execution. However, whether we consider its influence on the system, or the niceness of the mode necessary for effecting it, it is nearly equal in importance to any operation in surgery; and hence many expert surgeons have almost an invincible dislike to it, while the person ignorant of the great nicety, steadiness, and exactness necessary, as well as its effects on the constitution, performs it with the greatest freedom, but not with uniform success; as is proved by the many melancholy cases that are admitted into our hospitals in consequence of the ignorance of the operator, either by wounding a tendon or puncturing an artery*.

When the intention is to lessen the general mass of blood, the superficial veins on the front of the arm, over the bend of the elbow, are not only more safe and convenient for opening, but experience has proved that the blood flows more freely from them, which, in many acute diseases, is of great consequence; for it is a well established fact, that the *speedy* extraction of a

* A blacksmith, in Herefordshire, who had obtained great celebrity as a bleeder, was requested by his wife to take a little blood from her arm on account of some slight indisposition. The lancet having unfortunately penetrated the brachial artery, and his usual means of stopping the flow of blood failing, he had recourse to pressing over the orifice cob-webs and lint, with such force, that a considerable portion entered the wound. The blood still continuing to ooze out, and the arm being considerably swollen, he sent her to the Hereford infirmary; but the inflammation having extended to the chest, and mortification commenced, amputation was rendered impracticable, and the poor woman died the following day.

few ounces of blood is more beneficial than double the quantity taken slowly from a small vein or orifice.

The person being properly seated in a good light, a bandage should be tied round the upper arm about three fingers' breadth above the elbow, sufficiently tight to compress the veins so as to prevent the return of blood, but not so tight as to prevent its passing by the brachial artery; for after the ligature is applied, the pulse should continue to beat, otherwise the vein will scarcely bleed after it is opened. A vein of moderate size, under which *no beating* or *tendon* can be discovered, should be chosen. The arm should be extended, and if the vein do not rise well, the patient should shut his hand or grasp a stick: the operator should then take the arm into his left hand, and if the vein appear loose under the skin, he should place the thumb of his left hand on it, about an inch and a half or two inches *below* the part he has fixed on to make the puncture. The lancet, being firmly held between the fore finger and thumb of the right hand, is then to be *steadily* introduced into the vein *obliquely*, and taken out by *elevating* the *point* so as to enlarge the puncture. When the quantity of blood judged sufficient has flown, the ligature is to be removed; and the edges of the orifice being carefully brought together, a compress of fine linen is to be laid over it, and the arm bound up with a riband. The right arm is more convenient to the operator than the left. If the patient be subject to faint during, or after the evacuation of blood, he should be placed either on a bed or couch. In some diseases, however, as strangulated rupture, inflammation of the brain and lungs, &c. it may be deemed advisable to induce fainting; for it is an admitted fact, that when bleeding produces a degree of fainting, it proves in those cases much more serviceable. It will, therefore, in some instances, be proper that the trunk of the body be placed erect on a chair, as most favourable for producing this effect.

There are often so many unpleasant circumstances happen, not only during the operation, (as the cellular membrane blocking up the orifice, the blood passing under the skin, &c.) but from the loss of blood, that it should only be performed by, or at least with the consent of, a medical practitioner; for, as an old physician has justly observed, "it is taking away what medicine cannot give." In internal bruises occasioned by severe falls, it is certainly necessary that the patient should lose blood immediately; when, therefore, the aid of a surgeon cannot be readily obtained, the *advantage* that would result from the *immediate* extraction of blood may, in general, more than counterbalance any slight mischief that may ensue from the operation not being judiciously performed. In sudden attacks of apoplexy, inflammation of the lungs, pleurisy, and all internal

inflammations and inflammatory fevers, attended with determination of blood to the head or lungs, the *speedy* loss of blood is often of considerable importance, but as the *topical* extraction may prove more beneficial than *general* bleeding, even in such cases it will be adviseable to defer it till the practitioner arrives, provided a greater delay than six or eight hours be not occasioned by it.

The symptoms of plethora, and particularly the fulness of pulse, on which popular medical writers have laid so much stress, as indicating the necessity of bleeding, are very fallacious; for inflammation of either the lungs, brain, or bowels, is often attended with a *small* and *feeble* pulse, which *after* the loss of blood, will become *full* and *strong*; hence again in apoplexy the pulse is rendered feeble in consequence of the compression of the brain, which frequently after the evacuation of blood will so far rise as even to indicate plenitude and strength; and it often happens in dropsical complaints, where the loss of blood would prove fatal to the patient, the pulse will beat with unusual strength. The pulse, likewise, of an old person, will feel hard and firm, from the *rigidity* of the coats of the vessel; hence the learned Celsus justly calls it "*res fallacissima*"; and the late Dr Heberden, in the London Medical Transactions, has published some ingenious observations to show how little it is to be depended on *alone*. See the Table of the Pulse in the Introduction to the Second Part.

To these observations on bleeding, it may not be amiss to subjoin some remarks on the practice of

PERIODICAL BLOOD-LETTING.

The loss of blood at certain periods of the year, is an error very common amongst the lower orders of people, and I conceive extremely inimical to the constitution. Bleeding is unquestionably a remedy of the greatest importance in a number of diseases, but like all others it has been much abused, and perhaps in few instances more than in that which relates to this absurd custom. A celebrated author observes "that he who wantonly or capriciously squanders this vital fluid, obstructs, and as it were cuts off the sources of his support and regeneration. The most essential and constituent parts of the human frame are formed from the blood*, and though it be true that the blood evacuated by periodical bleeding is soon

* "The blood is the life of man;" that is, this fluid contains the principles of nourishment, and distributes them to every part of the body for its supply and refreshment.

reproduced by the activity of the vital powers, yet this restoration is only brought about with considerable efforts, and at the expense of the whole machine." In most inflammatory affections, as I have already observed, bleeding, regulated according to circumstances, is often of greater importance than any other remedy, and doubtless has saved the lives of many; but those persons who, from a notion of preventing diseases, suffer themselves to be bled *regularly* once, twice, or oftener in a year, whether they are indisposed or not, ought to be informed that they are using means which, if persisted in, are likely prematurely to bring upon them those very diseases which they profess so much to dread, and appear solicitous to avert. Where the habit has been established, it may be *safely* and easily overcome by substituting in the place of bleeding at those periods a gentle purgative, and in order to prevent its future necessity, to abstain as much as possible from animal food and spirituous liquors. A vegetable diet affords the same support as meat; and has the very important advantage of not producing plethora.

OF SUBSTANCES LODGED IN THE GULLET, OR STOMACH.

When any foreign substance is lodged at the *top* of the gullet it may in general be removed by the fingers, or a pair of forceps; but when it has descended *far down*, it will be necessary to push it into the stomach, by introducing a probang (made with a piece of soft sponge fastened to the end of a slip of whalebone;) but if the article swallowed is *sharp pointed*, or has *acute angles*, this operation must be conducted with *great care*, as by the employment of *much force* it may be made to penetrate the substance of the gullet, which, in cases of *pins, needles, nails, or sharp pieces of bone, or glass*, is not an unfrequent occurrence.

When the article has passed into the stomach, whether it be sharp pointed, angular, or large, no means should be taken to *hasten* its passage through the alimentary canal; for if it be sharp pointed, it will be less likely to injure the intestines by passing *gently* with *hard faeces*, than by being hurried through them with *liquid ones*; and if it be large, as a shilling, a half-penny, a bullet, or fruit-stone, it will require some time to pass through the orifice of the stomach (termed the pylorus) into the intestines, and the more gradually it makes its way, the less mischief is likely to ensue. When this practice has been pursued, I never knew any serious consequence to follow the swallowing of such articles; but have frequently known much mis-

chief produced by the exhibition of aperient medicines, with a view to carry them off more speedily by stool.

If the article be metallic, as lead, copper, &c. it will be advisable to caution the person against the use of *acids*, till it has passed through the intestines, and to correct and prevent acidity, by taking a little magnesia every morning.

Emetics should never be given without the sanction of an *experienced* physician or surgeon.

The late Dr. Buchan, in his *Domestic Medicine*, observes, that if the various means he has suggested to hook out substances lodged in the gullet should fail, the operation of "bronchotomy, or opening the wind-pipe, must be performed." What advantage could possibly be derived from making an opening into the wind-pipe to remove a substance retained in a different tube, must puzzle an anatomist to conjecture. Should an apothecary, not conversant with the anatomy of the parts, be induced, by the great agony and apparent danger of the life of the person, to follow this author's advice, and after making the incision into the wind-pipe, and not finding the obstructing body there, should cut down to it, the life of the patient would very likely be destroyed.

When the substance cannot be removed, and the patient's life is endangered from the want of due nourishment being thrown into the system, or the person likely to be suffocated in consequence of the compression of the posterior part of the wind-pipe, œsophagotomy, or making an incision into the gullet, may be necessary; in performing which, the wind-pipe is not wounded. On account of the imminent hazard attending this operation, from the great blood-vessels that lie contiguous to the part, it is never practised but in cases of the utmost danger, and should be performed only by a surgeon well versed in the anatomy of the parts. Under such circumstances, nourishing clysters have been known to support life for many weeks. See *Nutrient Clyster*.

OF SUBSTANCES AND INSECTS LODGED IN THE EAR.

Although the formation of the external parts of the ear and viscid nature of the internal secretion are admirably calculated to prevent flies or foreign matter getting into it, yet it happens that much distress is thereby induced. Children often push small peas, fruit-stones, &c. and other such articles into their ears, and flies and other insects frequently creep into them, and by touching the tympanum, produce much noise and distress. They may in general be removed with facility by a

common forceps; when the substance, however, is round, it may be more readily turned out by means of a curved probe, the end of which should be passed behind it; when the article is large, a little oil should first be dropt into the ear.

When insects have got so far into the ear that they cannot be taken out with forceps, the best method of removing them is to wash them out by throwing in warm water or any other mild liquid, by means of a syringe. If it adheres with firmness, which they often do while living, the ear may be filled with oil or brandy, which may be kept in for some time (by the person resting his head upon the opposite side) for the purpose of killing it, when it may be readily removed by forceps or a curved probe.

Peas and other soft bodies which swell with moisture, are so apt to become large by remaining in the ear, that they should be removed as soon as possible. When it has been neglected, and the substance cannot be taken out from its enlarged state, it must be divided with the points of a pair of scissars, or a sharp small hook cautiously introduced along the passage; and as soon as sufficiently divided, it may either be removed by piece-meal with the forceps, or washed out with a syringe. In the same manner peas and other extraneous bodies may be removed from the nostrils.

OF THE ORDINARY MANAGEMENT OF CHILDREN.

It appears by the general bills of mortality, that no less than one half of the children born in this country die before they attain the age of six years*.

This mortality being peculiar to the human race, it is somewhat extraordinary that it did not attract the attention of the ancient physicians†. Of late the source has been investigated and the consequence is that many of the vulgar errors in nursing, handed down from time immemorial, are in a great

* The average of the bills of mortality for ten successive years, in London and its environs, demonstrates that more than one half the children born within their limits, die under seven years of age. In Manchester and Birmingham the proportion is nearly the same, but throughout the country very considerably less. Some have estimated the death of children in London to be at least double that in the country.

† It is remarkable that there was not a *rational* treatise on the management of children published in this country prior to that of Dr. William Cadogan, in the year 1776.

measure abandoned, or at least so far eradicated, that nature and reason begin to take place of prejudice and ignorance. The calamity is justly ascribed by those physicians who have paid particular attention to the management and diseases of children, viz. the late Dr. Cadogan*, Dr. Alexander Hamilton†, and Dr. Heberden‡, to wrong management during the first and second years of their infancy, viz. to their “*being both fed and clothed improperly.*” That the present method of nursing is wrong, certainly needs no other proof than the frequent miscarriages attending it, the death of many, and the ill health of those that survive. This mortality may, in some degree, be a natural evil, but the majority of instances may be justly attributed to neglect or officiousness; for the brute creation, guided only by instinct, attend to the dictates of nature, and therefore few perish until the natural limits of their existence is completed; while man, the child of art and refinement, proud of his boasted reason, is very liable to err§.

OF THE CLOTHING OF CHILDREN.

The first great mistake arises from the prejudice of nurses, in loading and binding children with flannels, swathes, stays, &c. almost equal to their weight, which render a healthy child so tender and chilly, that it cannot bear the external air||; and if by accident it should be exposed to a refreshing breeze, the consequence is frequently a serious inflammatory affection of the lungs or bowels: or if the child should survive the first month, it is then sent into the country, to be reared in a house that admits wind and air from every quarter! Now a new-born infant, being *naturally warmer* than an adult, requires in proportion less clothing, and which should be put on so loose, that the bowels may have room, and the limbs liberty to act and exert themselves, that the circulation of the blood, through the *superficial* vessels, may not be impeded, or malformation or unnatural swellings be produced by *partial* compression. To the latter are doubtless attributable the many distortions

* In a Letter to a Governor of the Foundling Hospital.

† In a late Treatise on the Management of Female Complaints.

‡ A Treatise on the Management and Diseases of Children.

§ Whatever the advantage of modern refinement may be to society, the life of man is certainly abridged by it; for uncultivated man is not only exempt from a number of diseases to which the civilized is subject, but rarely dies till he has run his natural course.

|| The clothes of children should, in all cases, be proportioned to the climate and temperature of the atmosphere.

and deformities*, particularly among females, who suffer more in this respect than males. The great pleasure a child manifests, on being divested of this superfluity of dress by all its powers of expression, one would suppose sufficient to convince nurses, were they capable of making just observations, that the free use of its muscles is more agreeable to its feelings, as well as necessary for its growth and strength.

A flannel waistcoat, *without* sleeves, made to fit the body and tie *loosely* behind, with a petticoat, and over this a kind of gown, both of the same thin, light and flimsy materials; the petticoat should not be quite so long as the child; the gown a few inches longer, with one cap only on the head, and the linen as usual, I think abundantly sufficient for the day, laying aside all swathe†, bandages, stays, and the contrivances that are most ridiculously used to close and keep the bones of the head in their place, the latter of which, by confining and compressing the brain, have no doubt been productive of very serious mischief to that organ, and capable of producing that formidable disease commonly termed Watery Head. Shoes and stockings are likewise *unnecessary* encumbrances; the latter keep the legs wet and nasty if they are not changed two or three times a day, and the former too often cramp and hurt the feet, so as to prevent their learning to walk. Children in this simple dress would be *perfectly easy*, and enjoy the free use of their limbs‡ and faculties. They should be put into it as soon as they are born, and continued in it till they are three years old, when it may be left off for any other more genteel and fashionable. They ought to be changed at least every day, to keep them free from sourness, which is preju-

* The negro children in the West Indies are suffered to lie and tumble about on the floor from their earliest infancy, perfectly naked: and with all the hardships they undergo at every period of life, there is scarcely a deformed negro to be seen; a convincing proof that the pressure of clothes is a means of producing deformity, when we see on the other hand so many victims of it in this country.

† It sometimes happens that a portion of intestines protrudes at the navel, through violent crying; in this case a *soft broad* piece of thin flannel, in the form of a roller, is necessary. It should never be made too tight, otherwise it may not only hurt the bowels, but perhaps produce rupture at the lower part of the belly.

‡ The unnatural custom of confining the limbs of a child during night cannot be too much reprobated or guarded against by parents: a simple contrivance to confine the hands in order to prevent the child from rubbing or scratching its eyes, is often necessary; but the confinement of the legs should on no account, be allowed.

dicial to the tender state of infancy. The night-dress should be only a *loose* flannel shirt, and less in quantity to those which are worn during the day, otherwise the child will be very liable to be affected with cold and complaints of the bowels. —Tape should be used instead of pins in putting on their napkins.

THE FEEDING OF CHILDREN

is of greater importance than their clothing. Great care should be taken that their food be wholesome and good, and that it be given in such quantity only as the body requires for its support and growth. In the business of nursing, as in physic, we should endeavour to follow the dictates of nature. When a child is born, it is full of blood and excrement; and it requires some intermediate time of abstinence and rest to compose and recover it from the effects of the pressure it sustained in the birth; as well as the slight fever arising from the revolutions it undergoes by the process of delivery. If the child have sustained no injury, it will soon fall into a sound sleep of six or seven hours, when it will awake, refreshed and hungry. It should then be put to suck*; if there be no milk, the sucking of the infant will, in a few hours, infallibly bring it, and if nothing else be given, the child will grow strong, and the mother perfectly recover in a few days. The general practice of forcing down a child's throat, as soon as it is born, a lump of butter and sugar, or a little oil and syrup, with a view to cleanse the bowels, is exceedingly pernicious†. The

* If the nipples of the mother be short which is generally the case with the first child they should be first drawn out by the nurse, and in case of being tender it will be proper to wash them with a little brandy, instead of the poisonous preparation of lead, recommended by quacks and officious nurses. If the mother has small, tender, or ulcerated nipples, the prepared nipples (from the teats of calves) will enable her to give suck with great comfort. These nipples are very delicately prepared by Messrs. Savigny, and with care will last many years. I have, in many instances, found them to answer when the mother, through ulceration or total deficiency of nipple, could not otherwise have suckled her infant. The ease and advantages they afford are so very considerable and important, that it is much to be regretted they are not better known to the faculty.

† A lady of respectability in the city of London had nearly lost her infant through the nurse giving him, soon after it was born, a table spoonful of water, in which the end of a red hot poker had been put for a few minutes; this was done, as she stated, to prevent the thrush.

mother's *first* milk is of a purgative nature, and cleanses a child of its excrements without griping or disordering the stomach and bowels; indeed such is its gentle aperient property that no child can be deprived of it, without very manifest injury*. By degrees, the milk becomes less purgative and more nourishing and is unquestionably the best and only food the child likes, or ought to have, for *at least three* months. The call of nature should be waited for, to feed it with any thing more substantial; and the appetite always precede the food, not only with regard to the daily meals, but those changes of diet which increasing life requires.

I am well convinced that nine in ten of the diseases of children may justly be imputed to the mistakes of nurses, in the quality and quantity of food. With respect to quantity, it is a most ridiculous error to suppose, that whenever a child cries, it wants victuals, and thus to feed it twelve or more times in the course of a day and night. If the child's wants and motions be *diligently* and *judiciously* attended to, it will be found, that it seldom if ever cries but from pain. Children no doubt suffer very acute pain from spasms, in consequence of the over-distention of the stomach by food; the nurse, notwithstanding, in order to pacify it, will persist in forcing down its throat fresh quantities, or otherwise with the same view, it is put to suck, which will often relieve it by producing vomiting. If the stomach be frequently supplied with food, or be overloaded, it is impossible the whole contents can be properly digested; and hence by undergoing a fermentation, a quantity of air is disengaged, and acidity generated, which by producing spasms and irritation in the stomach and intestines, give rise to inward fits, convulsions, and not unfrequently inflammation of the bowels. The sensation of hunger being unattended with pain, a very young child will make other signs of its wants before it will cry for food. If it be healthy and quite easy in its dress, it will very rarely cry at all. Children that are fed only four or five times in twenty-four hours, are more healthy, active, and cheerful than those who are never suffered to be hungry. The great fault in the quality of the food, is its not being simple enough. The addition of spices and wine to their pap, and gruels and panadas, is unnecessary; they were first only introduced by luxury, to the great destruction of the health of mankind. A child should not be kept

* If the infant has been deprived of the first milk, by any untoward occurrence, a little oil of almond or fresh castor oil may be given for the purpose of cleansing the bowels.

entirely on vegetable food, on account of its tendency to fermentation in the stomach; and to the consequent production of an acid, which is the exciting cause of all their diseases. As we are partly carnivorous animals, our offspring should not be entirely deprived of animal food, which corrects the acescent quality* of vegetables. The mother's milk, when good, appears to be a mixture of vegetable and animal properties; in the due proportion of which consists that salubrity of aliment our nature seems to require. I would advise, therefore, that one-fourth of infant's diet be *thin* and *light* broth free from fat, with arrow-root, bread, or rice flour. The admixture of animal jelly, with that of the arrow-root, recommended under the head of arrow-root, is likewise an excellent combination for weakly children. (See Arrow-root.) The other part of children's diet may be a little toasted bread, or tops and bottoms, boiled with a little water, almost dry, and then mixed with *fresh* milk, *not* boiled, the properties of the milk and its taste being much changed by heat. This, *without* spices, or any other pretended amendment whatever, will be perfectly light and wholesome. A sucking child may be fed twice a day at first, and not oftener: once with the broth and once with the milk thus prepared, in quantity just to satisfy its hunger. They should always be fed in a sitting posture, that swallowing may be more easy to them. If a child be not accustomed to feeding at night it will not want it, but get into a habit of sleeping all or most part of the night very quietly, only waking for a few minutes, when its napkin requires to be changed. It is night-feeding that makes children so over fat and bloated. At the end of twelve months, the child should be weaned, by insensible degrees, that it may neither feel nor fret for the want of the breast.

Strong liquors of all kinds should be scrupulously avoided. The custom of giving a child spirits in its food, or in the form of toddy, with the supposed view of *preventing* gripes, is very pernicious. Such liquors, although well diluted, applied to their tender digestive organs, must unavoidably impair their functions, and may lay the foundation for a train of the most dangerous complaints. It has been urged in favour of this

* When this acid corruption of food predominates, which is obvious from *crude*, *white*, or *green* stools, gripes, and purgings, a little magnesia or lime water, (See Magnesia) in mint water, will prove the best remedy; but if attended with *much* pain in the bowels, known by the child's kicking and drawing up its legs, the absorbent mixture, No. 73, will prove more serviceable than magnesia alone.

horrid unnatural practice, that many children, accustomed to a little spirits from a few days after birth, continue to thrive uninterruptedly; but such arguments only tend to prove that the vigour of constitution in these children was so great as to resist the usual effects of strong liquors.

Was this plan of nursing literally pursued, the children kept clean and sweet, tumbled and tossed about, played with and kept in good humour, and carried out every day when the weather admits of it, I am confident in the course of eight or nine months, most children would become healthy and strong, and able to sit without support; to divert themselves an hour at a time, to the great relief of their nurses; would very readily find the use of their legs, and very soon shift for themselves. By this method of nursing, likewise, *hereditary* diseases may be eradicated, and, in a generation or two, every taint and infirmity, the king's evil and insanity not excepted, may be worn out.

It is a duty incumbent on every father to have his child nursed under *his own eye*, and to make use of *his own* reason and senses in superintending and directing the management of it; and that of the mother to *suckle it herself*; if she be healthy it will confirm her health, if weakly, it will, in most cases, restore her*. It need be no confinement to her, or abridg-

* It is much to be lamented, that the luxuries which modern refinement has introduced in the manner of living, although they may not prevent every woman from being a mother, certainly render many very unfit for the office of a nurse; but when the mother is of a strong constitution, she is unquestionably the most proper nurse, and ought to be advised to undertake the task on account of her own health as well as that of her infant. Whenever any other milk is to be substituted, that which approaches nearest to the human milk should be adopted. The milk of women differs in some respects from that of most other animals: it is light, thin, and at the same time highly nutritious, containing a greater proportion of sugary principle than that of other creatures. From its small quantity of curd, it is also more easily digested. Ass's milk, in these respects, approaches nearest to woman's, and next to it the mare's, then the cow's, and then the sheep and goat's.

Women predisposed to consumption are the most prolific, and during gestation the disease of the lungs is generally suspended. When a consumptive lady is delivered, it is often a difficult point to determine whether she should suckle her infant or not. On account of the emaciation, and weakened state of the mother, most medical men suppose that suckling will render her more weak; but so far from this being the case, I have uniformly found suckling to relieve the disease of the lungs, and improve the general health of the mother; and when they have been persuaded not to suckle their infants, the disease of the lungs has ad-

ment of her enjoyments; three or four times in twenty-four hours, will be often enough to give it suck. It may be fed and dressed by some reasonable servant, that will submit to be directed, with whom it might likewise sleep. No other woman's milk can be so good for her child; and *dry* nursing is the most *unnatural* and *dangerous* method of all; for not one child in three, thus brought up, lives a year.

EXERCISE OF CHILDREN.

Without a proper degree of exercise, all our care in feeding and clothing infants, will not succeed to our wishes, till, by due degrees, a child is brought to bear a good deal of exercise without fatigue. It should be pushed forward and taught to walk as soon as possible, so that at the end of twelve months, it may (if healthy) be capable of walking alone. It is a vulgar error to suppose children are not to be put on their legs, because they are weak or the least bent or crooked; daily experience shows crooked legs will grow, in time, strong and straight by frequent walking*, and that disuse makes them worse. The walks should be gradually increased every day, till they can go two miles without weariness, which they will very well be able to do in three years, if they be accustomed to it properly. From this daily exertion, they will, from the impulse of their own active vigour, soon be found running, leaping, and playing, all day long. Thus a dull heavy child may be made playful and sprightly, and a weakly one healthy and strong, and confirmed in good habits and permanent health.

There are other little niceties, which were they observed in

vanced with such wonderful rapidity as to destroy life in a few days. When the appetite is good, I would advise a consumptive mother, however emaciated or reduced her system may be, to suckle her child about two or three times in twenty-four hours as the most likely means of restoring her to health. (See Consumption.)

It is worthy observation, that those mothers who have neglected to suckle their offspring are most subject to cancerous complaints of the breast and womb, and consumption of the lungs.

* Every member acquires strength in proportion as it is exercised; and children by being accustomed to support themselves, will soon acquire strength for that purpose. When, however, the limbs are much curved, and evidently grow worse as the child is put more to bear on them, instruments may be necessary, not only to support the weak bones, but also to prevent the weight of the body falling too much on them. (See Rickets.)

the nursing of children, would be of some service to them, such as making them lie *straight* in bed; I do not mean extended like a corpse, but that their limbs may be *free* and *easy*. They should be taught to use both hands alike; for employing one more than another*, will make that hand and side of the body bigger than the other, and is often the cause of crookedness; neither should they be always laid on the same side, nor carried constantly on the same arm. It would likewise not be amiss to forward their speaking plain, by speaking plain distinct words to them, instead of the jargon generally made use of by nurses.

Dr. Hamilton condemns the use of cradles for children, on account of their being *improperly used* by nurses. This author recommends a crib, to be so constructed as to be fixed to the side of the bed during the night, and to be easily carried from one room to another during the day: it must not be made to rock. In *cold* weather, the infant ought never to be allowed to sleep by itself, as heat is absolutely necessary to keep up the vital functions of a *very young* or *weakly* infant.

“ By arts like these
Læonia nurs'd of old her hardy sons,
And Rome's unconquered legions found their way,
Unhurt, through ev'ry toil, in ev'ry clime.”

* On this absurd custom both of parents and nurses, a late author observes, “ Great pains are generally taken by mothers that their children should not be *left-handed*, by which injudicious anxiety they are prevented from the full use of that member. Nature has given us two hands alike in form, equal in strength, and equally calculated for exertion; but by the present practice, this gift is in a great measure abandoned, and one of them comparatively rendered inefficient. Were the same trouble taken to make children use only their right eye, the consequence to the left eye would be exactly similar. If, therefore, I have the good fortune to persuade sensible mothers to amend this universal error, I shall enjoy the satisfaction to think that I have in no small degree contributed to the good of society. I would recommend that children, from their earliest infancy, be habituated indiscriminately to use both hands, to alternate them in all their little manual occupations, and when sufficiently grown, they should be encouraged to cut their meat, and employ their exertions with either hand. Swinging what are called dumb bells, is a most useful exercise in this respect, as strengthening the arms, opening the chest, giving muscular action to the body, and invigorating the whole system. Every one must be sensible, how much habitual exertion adds to the powers of the members employed.”

INSTRUCTIONS FOR THE CHOICE OF A WET NURSE, &c.

It is not sufficient a wet nurse be only clean, healthy, sober, and temperate, but likewise middle-aged, because at that period she will have more milk than the very young, and more and better than the old: this is a very material consideration when she has her own child to suckle besides.—Those between twenty and thirty are certainly of the best age. Great regard should be had to the time of their lying-in, and those procured who have not been brought to bed more than three months: for nature intending that a child should suck only twelve months, the milk seldom continues good much longer; for about that time, women, though they give suck, are apt to breed again, and some that are very sanguine much sooner; which, and other periodical causes, disturb and affect the milk greatly, and therefore they are not proper for nurses so long after their delivery*.

The nurse's food should consist of a proper mixture of flesh and vegetables: she should eat one hearty meal of *unsalted* meat every day, with a great deal of vegetables and little bread, and thin broth or milk for her breakfast and supper, and her drink not stronger than good ale or porter.

If the child has not sucked its own mother, it should have a little purgative physic in a day or two after its birth, to carry off the long-boarded excrements: for this purpose a little manna may be given it, dissolved in water; or the nurse may take a little lenitive electuary, which, through the medium of the milk, will act on the bowels of the child: by these means, three or four stools should be procured in twenty-four hours.

The child should be kept awake by day, as long as it is disposed to be so, and great care be taken that no anodyne quack medicine be given, or means taken to lull or rock it to sleep, or to continue it asleep long, which is too much the custom of wet nurses, to save their own time and trouble, to the great detriment of the child's health, spirits, and understanding. If the nurse has another child to support with her own milk, the sooner the child is fed according to the method I have

* From chemical experiments it appears, that the milk of a woman varies at certain stages of suckling. If this fact, therefore, be duly considered, how important is it that this nourishment should agree with the child both as to age and its specific quality? Nature and reason equally point out the propriety of a mother's suckling her own offspring where health admits of it.

recommended the better, as it is not likely she should have milk enough to support two.

A healthy child may be allowed a little mellow fruit, either raw, stewed, or baked, and the produce of the kitchen-garden, which, *in moderation*, is perfectly grateful and salutary. As soon as the child has any teeth, it may be used to a little flesh-meat, which it will be more fond of than confectionary or pastry wares, the latter of which will only debauch its taste.

OF THE DISEASES OF CHILDREN.

Having observed that the first and principal cause of almost all diseases that assail us during childhood, is the acid corruption of the food, and it being easier to prevent diseases than cure them, it will not be amiss to mention in this place a certain preventive, if given in due time.

On the first appearance of predominating acid, which is evinced by curdled, white, or green stools, gripes, and purgings, five grains of magnesia, No. 1, combined with two grains of rhubarb powder, No. 26, should be given in a little mint water, or the prepared natron, as directed, No. 60, which will correct the sourness more effectually than prepared chalk, or Gascoign balls, so generally employed by nurses; and instead of producing a costive state of the bowels, the certain consequence of these cretaceous absorbents, the magnesia and rhubarb, or prepared natron, will gently carry off the offending matter, and at the same time strengthen the stomach and bowels. If the purging, however, should continue excessive during the use of either of these medicines, the absorbent mixture, No. 73, may be substituted; and provided that should not restrain it, the cretaceous mixture, No. 64, will be necessary. If the child be supported entirely by the breast, the mother should live more on animal food; and if it be allowed any spoon-meat, it should be the vegetable and animal combination mentioned under the head of arrow-root. By the *early* employment of these remedies many complaints may be prevented, which, from neglect, grow from bad to worse, and too often end fatally.

OF INWARD FITS.

The spasmodic affections, termed by nurses *inward fits*, is the first complaint that appears in children, and to which most, if not all children, are more or less subject. The symptoms are, an appearance of being asleep with the eyelids a little open, and frequently twinkling, with the eyes turned upwards; the muscles of the lips are affected with a tremulous

motion, producing something like a smile, and sometimes almost the appearance of a laugh. The breathing becomes interrupted, and appears now and then to stop a little, with a considerable fluttering at the heart, and intermission of the pulse; the nose becomes pinched, a pale circle encompassèd the eyes and mouth, often livid, and at times disappearing entirely. The child at length becomes so irritable and nervous, that it starts at the least noise; it will then sigh and discharge wind, which affords a temporary relief, and presently relapses into a dozing. Sometimes it struggles very much before the wind is expelled; then vomiting, or a loud fit of crying, sets all right again. As the child advances, these fits generally go off by degrees spontaneously: or by mismanagement in their diet, grow worse, succeeded by fever or thrush; or end in vomitings, or sour, curdled, and green stools, and convulsions of the whole body.

Dr. Armstrong, who has fully treated on this disease, and whom subsequent writers have copied, imputes it to a quantity of mucus squeezed out of the mouth of the glands and fauces, by the contraction of the muscles and pressure of the nipple in the act of sucking, which, with the addition of the mucus of the gullet and stomach, mixing with the milk, renders it of a slimy consistence, by which means it is not readily taken up by the vessels for the nourishment of the body; and as there is in most children an acidity in the stomach, the milk is thereby curdled, which adds to the load; hence sickness and spasms are produced, which, by sympathy, being communicated to the gullet and fauces, occasion the convulsive motions enumerated above. Other authors, who coincide with the Doctor in this opinion, think that they are aggravated, if not produced by air swallowed with the milk in sucking, from the relief a child experiences on the expulsion of air, which, however, was more likely to be generated in the stomach than taken with the milk; nor can they be attributed to a corrupt or vitiated state of the saliva, inasmuch as almost all children are more or less affected with them. Besides, if the Doctor were right in imputing the disease to the *quantity* of mucus swallowed during *suction*, children that are not suffered to suck at all, would be entirely exempt from them, which we find, however, so far from being the case, that children brought up by the hand are more subject to them.

There is little doubt but this complaint is produced by overloading the stomach with food, which, from its not being able to convert into chyle, becomes acedent, and excites considerable irritation in the bowels. The mechanical distention of the stomach at the same time co-operates in producing

spasms, which, extending to the diaphragm, heart, and lungs, may occasion sudden death.

The cure will, of course, depend on avoiding the occasional cause, and by emptying the stomach and bowels by gentle emetics, and the use of calomel, No. 34, or basilic powder, No. 36. In case of violent purging, or gripes, the cretaceous mixture, No. 64, will also be necessary: and the warm bath, or a blister on the chest, if the breath be affected. The almond emulsion noticed in the Appendix, is not only an excellent beverage, but also the best medicine if the bowels appear to be in fault, and if the system be feverish. Spirit of hartshorn, sal volatile, tincture of asafoetida, and other *stimulating* anti-spasmodics, so frequently prescribed in those cases, generally aggravate the symptoms, by increasing fever or irritability of the system.

I have known many instances in which the symptoms have abated, and the fits gradually gone off, on changing the food of the child from a vegetable to an animal jelly, as that of hartshorn shavings, isinglass, or calves' feet. If the milk of the mother be ever improper, it is in such cases, where the afflictions of the child disturb her mind, for it is an indisputable fact, that mental perturbation has a very unfavourable influence on the milk.

OF CONVULSIONS OF CHILDREN.

Children are more subject to convulsive fits than adults, from the greater degree of excitement of the nervous system. Convulsions originate from such a variety of causes, and of course require such different treatment, that a practitioner of skill and experience should always be consulted on their *first appearance*. When they are occasioned by dentition, they are less dangerous.

In all cases of the convulsions of children, great attention should be paid to the state of the stomach and bowels; if they appear to be in fault, the basilic powder, No. 36, will prove of considerable advantage, and often effectually cure them. If they arise from difficult dentition, small doses of liquid laudanum, after the due operation of the basilic powder, will be proper. (See Dentition.) If they are attended with a determination of blood to the head, or that chronic inflammation of the membranes of the brain, which precede the disease termed watery head, blisters to the head and feet, the application of leeches to the temples, and active purgatives are necessary.

Convulsions of children, I believe, are very rarely, if ever,

a primary disease, but depend on some local irritation, as cutting of the teeth, worms, bad digestion, &c.

OF DENTITION, OR THE CUTTING OF TEETH.

Whatever fever, fits, or other dangerous symptoms seem to attend this operation of nature, healthy children generally breed their teeth without any such bad attendants, which inclines me to suspect the evil not to be natural, but rather the effect of too great fulness, or corrupt humours of the body put into action by the irritation the tooth produces in making its way out*. This I believe never happens without some pain, and probably a little fever, but if the system be not rendered too inflammatory by improper diet, both will be but slight, and pass off imperceptibly without any bad consequence whatever. Care should therefore be taken to keep the body in a healthy state, by proper diet and exercise. That children that live much on animal food, particularly in substance, suffer more during dentition than those that feed on milk and vegetables cannot admit of a doubt.

The period of teething generally commences between the fifth and tenth month†, and the process of the first set, which consists of sixteen, continues for nearly two years.

The bad symptoms produced by this operation of nature, are, restlessness, frequent and sudden startings, especially in sleep, costiveness, and sometimes violent looseness, fever, or convulsions. In general those children breed their teeth with the greatest ease, who have a moderate laxity of the bowels, and a plentiful flow of saliva, or spittle, during the time. A costive state of the bowels, as tending to increase the inflammatory disposition of the constitution, should be guarded against, by giving occasionally a little magnesia and rhubarb, or senna, (See No. 50,) and when excessive looseness occurs it should be moderated by a mixture with lime water, No. 64, or two drops of laudanum, No. 31, in a little mint water, to which six or eight grains of the cretaceous powder, No. 29, or prepared chalk, may be added if very violent; and if the skin be dry, and the child feverish, one grain of ipeca-

* Hereditary diseases, which might otherwise have lain dormant, are frequently put into action by the irritation and fever attendant on dentition; hence the first appearance of coughs, rickets, and various forms of scrophula, may be traced to this period. Teething may therefore be considered a very critical time of the life of a child.

† Children are sometimes born with teeth, but they seldom or ever last long.

cuan will prove useful, by producing perspiration. The *discreet* use of laudanum is a very important remedy in this instance: and by allaying the irritability of the gums, and quieting the nervous system, will prevent fever and convulsions. If its frequent exhibition produce a costive state of the bowels, a little magnesia should be given with it, and the cretaceous powder omitted.

As children about this period are generally disposed to chew every thing they can get into their hands, they should always have something to play with that will *yield* to the pressure of their gums. The Indian-rubber, or elastic gum, secured round the end of a rattle, I have found for this purpose to answer best*. The repeated muscular action, occasioned by the constant biting and gnawing of such a substance, will increase the discharge from the salivary glands, while the gums will be so forcibly pressed against the advancing teeth, as to make them break out much sooner, and with less uneasiness than would otherwise happen. If these means should prove ineffectual, and bad symptoms begin to appear, the inflamed gum should be lanced; and if the tooth be so far advanced as to be *distinctly* felt beneath the gum, the incision should be made down to it, but not otherwise, as the divided gum by uniting will form a cicatrix that will render its passage more tedious and painful.

Blisters applied to the nape of the neck, or behind the ear, by diminishing the irritation of the gums, will abate the fever, which is entirely sympathetic. If the child should be much reduced, it should be supported with cordials and a nutritious diet.

By the foregoing observations, it will appear clear, that during the period of dentition, it is necessary to attend to the state of the stomach and bowels, to obviate costiveness by the use of magnesia, to moderate and not entirely check looseness, to quiet or prevent fever by the occasional use of laudanum, to lance the gums only when considerably swelled, or when the tooth has nearly made its way out, and not to inflame the system by animal food or wine.

SWELLING OF THE BREASTS OF INFANTS.

A slight distention of the breasts of new-born infants, from a collection of whitish serous fluid resembling milk, is a very

* The coral generally given to children at this time to bite, from its hardness, certainly renders the gums more callous and consequently dentition more difficult and painful.

common occurrence in both sexes, and is of little consequence, unless attended with inflammation, which is generally occasioned by the preposterous practice of nurses attempting to squeeze out the fluid with their rough hands. If the parts be not irritated by the clothes compressing them, it will go off gradually, without the aid of medicine; but in case of much inflammation, they may be washed gently three times a day with brandy. Oily applications, with the rubbing employed by nurses, and even recommended by some practitioners, are very improper, and never fail to produce fresh mischief.

But if the inflammatory symptoms should run high, the most active means should be adopted for its dispersion, such as the application of a leech or two, a discutient lotion of equal parts of brandy and vinegar, applied cold, and an aperient medicine, (magnesia and rhubarb) as the formation of matter might not only leave an unpleasant scar, but in the female might injure the gland, so as to render her at any future period unfit for the office of suckling. If the inflammation should, notwithstanding, advance to maturation, the early advice of a surgeon should not be neglected.

INFLAMED, OR SORE EYES OF INFANTS.

Inflammation of the eye-lids and eyes, especially such as are attended with a discharge of thick matter, should, in children, be considered of too great importance to constitute a part of domestic medicine, as it frequently terminates in an adhesion of the coats of the eyes, and thus occasions permanent blindness; the advice of a surgeon should be taken, in the first instance, while there is a prospect of its being attended with advantage.

A small blister behind the ear, or to the nape of the neck, a leech to the eye-lid, the basilic powder, No. 36, or calomel, No. 34, and the continued application of a lotion made by dissolving two grains of white vitriol in four ounces of water, will often succeed in curing the most obstinate attacks. The eye-lids should be opened, and the lotion dropped between them, as well as applied externally, by means of folds of soft old linen. If the child be of a scrophulous habit, or subject to sore eyes on taking cold, an issue in the arm will not only correct the constitution, but by keeping down the inflammatory state of it render the eyes less liable to inflammation; the frequent recurrence of which often produces the worst species of blindness.

OF GALLING OF INFANTS.

The inflammation, and slight excoriations which frequently occur in the groin, between the legs, termed galling are not only painful to the infant, but often perplexing to the nurse, especially if the child be much loaded with fat. It generally arises from inattention to cleanliness, but sometimes from the use of coarse or new napkins.

The cure may always be effected by first washing the parts with cold water, and afterwards gently besmearing the surface with fine fuller's earth moistened with water. If it be situated in the groin, or near the genitals, it should (after being washed) be covered with a little *fresh* spermaceti ointment, to defend it from the action of the urine, the saline particles of which produce much pain, and increase the inflammation. The moistened fuller's earth may afterwards be applied as directed above.

Milk, so frequently employed by nurses as a wash in these cases, by turning sour on the part, often excites fresh irritation.

A preparation of lead, termed ceruse powder, is in very general use as a dusting powder, for children: it is, however, a very dangerous application; and I have no doubt, has occasioned the death of many children, by producing convulsions and inflammation of the bowels, instances of which I have noticed under the head of Goulard's Extract of Lead, No. 50.

In the Domestic Medicine of Dr. Buchan, the *sugar of lead* is imprudently recommended to be added to an absorbent powder when the parts are very sore, or tend to ulceration, without even specifying the quantity. The Doctor should have known that lead, in a saline state, is a dangerous application for adults, and much more so for infants.

From the inattention of medical men to these particulars in the management of infants, I am persuaded their diseases are often referred to a wrong cause, and their lives absolutely destroyed by the prejudices and ignorance of nurses.

OF THE RED GUM.

This disease consists in an eruption of small pimples in the skin, which are evident to the touch, generally red, but sometimes yellowish. It appears for the most part on the face, and sometimes on the body and extremities, in clusters or large patches. It is considered by most medical practitioners, to be salutary, and it often seems to relieve infants of complaints of

the bowels, and difficulty of breathing; but sometimes it is attended with no such benefit, and may frequently be traced to some imprudent practice of the nurse, either in washing the infant with brandy as soon as it was born (from a mistaken notion that it hardens the skin) or by roughly washing it with soap, for the purpose of removing the thick glutinous matter with which all infants are more or less covered when born, and which I have no doubt is intended by nature to protect the tender skin, during its foetal state, and to guard it against the action of the atmospheric air; and if it be only removed in such quantity as gentle washing with warm water and a soft old piece of linen will take off, it will leave the skin white and healthy, instead of the dark, red, and irritable state occasioned by the spirit*, soap†, and friction employed for its removal.

As the eruption may sometimes be critical, it would not be adviseable to employ any *external* application to repel it, but rather to prevent its sudden repulsion, by avoiding exposure to cold air, and keeping the bowels gently open by small doses of magnesia and rhubarb: and should it by accident recede, and the child be evidently indisposed in consequence of it, the warm bath and a gentle emetic of ipecacuan will be necessary, which, by producing a détermination to the skin, generally succeeds to expel it. If cough or difficulty of breathing, or a violent affection of the bowels intervene, medical advice should be immediately resorted to.

OF THE THRUSH.

This disease appears in white specks on the corner of the lips, the tongue, and back part of the palate, sometimes gradually spreading all over the inside of the mouth, and, from its appearance about the anus, it has been supposed to extend throughout the intestinal canal. Infants brought up by the

* The evaporation of spirits from the surface of the body, whether an infant or an adult, generates such a degree of cold as to check insensible perspiration, and thus may occasion inflammation of the brain, lungs, bowels, or eyes: the practice, likewise, instead of hardening the skin, renders it more tender; it cannot, therefore, be too much deprecated.

† The most simple wash for children is a water in which some almond powder has been rubbed between the hands, or fine almond powder may be used instead of soap: it will, in all cases, answer better than soap, the alkaline salt of which injures the skin, while the almond powder will render it healthy.

hand are most subject to this disorder, and to those it does not unfrequently prove fatal.

The late Dr. Buchan was not perfectly correct in describing this disease to consist in a number of small ulcers, affecting the whole inside of the mouth, &c. They certainly are not ulcerations, but, as Dr. Hunter states, a kind of inflammatory exudations, which is confirmed by their falling off, and being succeeded by others. It often extends down the gullet, and sometimes the whole internal surface of the intestinal canal is affected, in which case it generally makes its appearance at the fundament. It is attributed by some medical writers to the use of wine, spices, or a too great proportion of vegetable food; but in general it may be traced to stale food, acidity in the stomach, or to the food being given too hot.

The cure of Thrush will depend on a change of diet, to a proper combination of vegetable and animal jellies, as directed under the head of arrow root, or the employment of veal-broth, or beef-tea, thickened with arrow root or fine wheat flour. A costive state of the bowels should be obviated, by occasional doses of magnesia, with either calomel or rhubarb, and the parts affected touched with the following detergent liniment three or four times a day, by means of a large camel-hair-pencil.

Take of honey of roses one ounce;
Muriatic acid ten drops;
Liquid laudanum forty drops. Mix.

Borax, well mixed with honey, in the proportion of one drachm of the former to an ounce of the latter, has been much recommended, and on account of its consistency, will often answer better than a thin liniment.

In the treatment of thrush, it is therefore necessary to attend to the diet of the infant, to take care that the food be not given too hot, to correct acidity either by magnesia or lime water, according to the state of the bowels, as directed under head of magnesia, and by the topical application of the detergent liniment. If the child be restless, the use of laudanum, as directed in cases of difficult dentition, will be necessary.

ON THE POWERS OF THE MIND, DIET, &c.

Most of the diseases that assail human nature, arising either from irregularity in our mode of living, improper regimen, inattention to cleanliness, or passions of the mind, it must appear obvious, that in order to treat them successfully, we must not confine our directions merely to the use of medicine, but give instructions on these different subjects.—One great inducement to commence this work with a *Family Dispensatory*

is the reference to the medicines in the treatment of the different diseases, rendering a repetition of them unnecessary. For the same purpose I shall here add some observations on the influence of the mind, on diet, cleanliness, &c. to which I may occasionally refer in the directions for the treatment of the diseases, in which I consider them more or less important.

We have almost daily proof that even in a state of health, the operation of the passions, and their influence on the body, is great; some exciting, and others depressing the vital powers; and these again, by some reflex, or active powers of the mind, acquire a new influence, totally independent of their first impression: thus anger hurries the circulation of the blood, and determines its impetus to the head; it is one of the most violent and vigorous passions of the mind, it glows in the eyes, the cheeks redden, the voice is thick and stammering, bilious vomiting, foaming at the mouth follow, with apoplexy, rupture of blood-vessels, inflammation of the brain, or violent fever. But to these, high as they sometimes rise, not unfrequently succeed, debility, languor, and depression, as the turbulent ocean sinketh into a silent calm.—If man be therefore thus subject to the influence of the passions during health, how great must be their effects when the vigour of health no longer sustains his frame? We should therefore endeavour to cultivate an acquaintance with the mind as well as the body.

THE PASSIONS OF THE MIND.

These have been styled, not unaptly, by a number of authors, the gales of life; and from them, in the language of scripture, may be said to proceed the issues of good and evil. They are the source of every agreeable and of every painful feeling.

The passions have been properly divided into two kinds, the exciting or enlivening passions, and the depressing ones. They operate on the body either suddenly; or in a slow, progressive, and gradual manner. Death has been known to be the immediate effect of the former; the latter generally produce a gradual decay and consumption. The choleric and sanguine constitutions suffer chiefly from the violent passions. The phlegmatic and melancholic ones, whose sensations are dull, fall victims to those of an opposite kind. The long continuance of one passion, by harrassing out the mind, is ever apt to produce bodily disease, and one termination peculiar to the effect of the passions is also apt to arise, viz. incurable mental imbecility. The cure of mental diseases has at all times formed the most difficult task for the physician, so much so, as to render it proverbial. Thus, in the language of Shake-

speare,—“who can minister to a mind diseased?” Change of objects, of impressions, and ideas, afford the only means for the guidance of reason, and argument has generally little sway. The early management of the mind, by a proper education, is the best guard against the mischievous effects of the passions at an after period. Their control becomes then a habit with the individual, and prevents any excesses which might otherwise spring from their occasional excitement by unforeseen circumstances. Hence it may be laid down, as a leading maxim, that the control of our passions is an indispensable requisite to the proper enjoyment of health. But in order to point out the effects of passions more clearly, it will be necessary to consider each of them separately, and with some minuteness. The first of the passions, and one we naturally wish to begin with, is joy. It is that state of mind in which there is felt extraordinary pleasure, and in which a high degree of animation takes place. The heart becomes expanded; the circulation is rendered free and vigorous; the eyes sparkle; the nerves feel a sensation connected with complaisance and mildness. Hence this state is favourable to the enjoyment, and even recovery of health, where it is languishing under diseases of a slow or rooted nature, and of a depressing kind. Of this passion, a variety of modifications or degrees occur, under the names of gaiety, cheerfulness, mirth, &c. &c.

The state of mind produced by this passion may be much favoured by a proper attention to the state of the evacuations, and also to the regulation of diet. The evacuation by the skin is in particular of the first consequence, and the diet should be of easy digestion, of an aperient quality, and in considerable proportion, of a vegetable nature. Hence dry air has a considerable influence in producing the state of mind favourable to this passion; and by the circulation being promoted by this benign disposition, a stagnation of the fluids, and consequent tendency to obstruction, is prevented; excessive joy, however, is often attended with severe evils; instantaneous death has occurred from the immediate and rapid tumult produced on the spirits by its unexpected occurrence. Wherever, therefore, it is carried so far, though even in less degree, as to occasion sleepless nights, and great evacuations by the skin, which it is apt to do; then it is necessary to moderate this extreme passion, as more dangerous than even grief, which excites the very opposite sensations. It is better where the mind is gradually prepared to meet, from any fortunate cause, the emotions of this passion, by which the effects will be lessened and regulated.

Laughter may be considered as a mode of expressing this passion, and, when kept within moderate bounds, is highly

useful. Laugh and grow fat, though a vulgar proverb, is a proof of its utility, and of common belief on this point. It promotes the circulation of blood through the lungs; it is equally beneficial to the organs of digestion; and, in consequence, has proved the means of relieving pains of the stomach, colic, and several chronic maladies connected with obstruction. The bursting of abscesses, in critical situations, has often happily been effected by this salutary effort. Hope is a modification of joy; or, properly, joy by anticipation. It is real joy without alloy, which often happens when the actual event or good, which gives rise to it, comes. Hope, then, is the most pleasing state the mind can be in, and is highly favourable to health. It tells always in the language of the poet, "a flattering tale," and paints the image, not as it is, but as it ought to be. Its beneficial influence on the body has been evinced in numberless instances, where it has produced a serenity of thought, and tended to prolong existence even in the most forlorn situations. It may be said to be that passion, or affection of the mind, which is the latest to leave us, and which continues to linger with us to the extinction of the vital spark on this side of the grave, and to point out, even before this event is completed, the scene that is expected beyond it. Hence it conveys, more than any other of our passions, an idea of

" The divinity that stirs within us,
And points out immortality to man."

Hail, thou first best feeling of our nature! Mayest thou never, in this scene of vicissitude, forsake us! Love is said to be the strongest of all the passions that can affect our nature; it is, at least, less under the control of reason than any other; and it is fit it should be so, when we consider that this passion is intended as the principle on which the continuance of the species depends. This passion generally affects the mind by degrees; but it is, at the same time, when once rooted, more fixed than any other; and hence the caution that ought to be observed, in not giving way to it at an early period, when it is still under the restraint of the will. Hence the just advice of the poet.

With caution and reserve indulge the sweet destroyer of repose,
Nor court too much the queen of charming cares:
For, while the cherish'd poison in your breast
Ferments and maddens, sick with jealousy,
Absence, distrust, or ev'n with anxious joy,
The wholesome appetites and pow'rs of life dissolve in languor:
The coy stomach loathes
The genial board, your cheerful days are gone;
The gen'rous bloom that flush'd your cheeks is fled:

To sighs devoted and to tender pains
 Pensive you sit, or solitary stray,
 And waste your youth in musing; musing first
 Toy'd into care your unsuspecting heart;
 It found a liking there, a sportful love,
 Which musing daily strengthens and improves
 Through all the heights of fondness and romance;
 And you're undone, the fatal shaft has sped,
 If once you doubt whether you love or no,
 The body wastes away, th' infected mind,
 Dissolved in female tenderness, forgets
 Each manly virtue, and grows dead to fame.

But while we thus caution against giving way to this passion in an ungovernable degree, it is not to be denied, at the same time, that the best effects are known to follow its reasonable indulgence. An attachment to a beloved object has been known to cure the most obstinate disorders, which resisted every other medicine, and it has produced a total change on the powers and disposition of the mind, often for the best purposes, by giving it an ardour and heroism to vanquish every obstacle that may present itself to its desires. It is where this passion is under the necessity of being concealed, and where there is no hope of enjoyment, as in many cases in the female sex, that it proves so detrimental to health, and preys with a secret uneasiness on the mind, such as is so beautifully described by Shakespeare, when he says—

She never told her love;
 But let concealment, like a worm i'th' bud,
 Feed on her damask cheek: she pin'd in thought,
 And, with a green and yellow melancholy,
 She sat like Patience on a monument,
 Smiling at Grief.

When long continued, it constitutes grief; when diversified by alternate agonizing sensations between hope and despondence, it is named distraction; and when overwhelmed with disappointment, it is properly despair. This passion, in its general feeling and effect, may be styled the slow poison that corrodes mind, and in the language of Scripture, "The worm that gnaws within;" the body becomes gradually enfeebled by its suffering, the circulation rendered slower, allows accumulation and obstruction of some of the organs to take place. The stomach and bowels no longer perform their functions with activity. Actual disease then intervenes. The nervous system, under its powerful sensations, occasions a peevishness and irritability of temper, and, occupied solely with his own ungrateful feelings, the unhappy individual falls a prey to me-

lancholy, and in time, in common language, dies of a broken heart.

Indolence and solitude are ever the supporters and nourishers of grief. Occupation and society are, therefore, its chief remedies. In this point music will form a useful lenitive. According to the poet,

There is a charm, a power that sways the breast,
Bids every passion revel or be still,
Inspires with rage, or all your cares dissolves,
Can soothe distraction and almost despair.

That power is music. Some indulgence in wine will be proper in such cases. The discharge of the skin should be promoted by friction and the warm-bath, and a dry, warm, or temperate climate should be the situation chosen for a residence. Weeping is generally the termination of a violent paroxysm of grief, and should be considered as giving relief, and as a useful palliative remedy. The next passion that claims the attention of a physician, and the most fatal of the whole, when carried to extravagant bounds, is anger. It has accordingly been termed a short-lived madness, and is frequently fatal by inducing apoplexy. This effect of it is beautifully described by Armstrong, when he says,

But there's a passion whose tempestuous sway
Tears up each virtue planted in the heart,
And shakes to ruin proud philosophy :
For pale and trembling Anger rushes in
With falt'ring speech, and eyes that wildly stare,
Fierce as the tyger, madder than the seas,
Desp'rate, and armed with more than human strength.
But he whom anger stings, drops, if he dies,
At once, and rushes apoplectic down ;
Or a fierce fever hurries him to hell.

Anger, therefore, according to its degree, induces different spasmodic and convulsive symptoms, and these occasion various rooted affections in different parts of the body, though chiefly of a temporary nature. Irritability of disposition evidently disposes to this passion, and particularly the hysterical and hypochondriac temperaments, as well as those of dry and rigid constitutions. In the former of these cases, when the passion is moderate, it is frequently beneficial, by increasing the circulation where sluggish ; but in the latter constitutions its attack is always dangerous, and every act should be avoided that might tend to produce it. For such persons a mild diluent diet is most proper.

All food that stimulates too much should be avoided, and

indulgence in a large proportion of sleep should always be favoured. During the fit of anger it should be treated as an inflammatory disease, and the secretion of the bile is chiefly apt to suffer here. Fear is a passion in its effects something similar to grief, for it weakens the powers of body and mind in various degrees, according to the different stages of it. It has been known to produce lunacy, and in its highest fit of terror to prove even fatal. Bashfulness, anxiety, and terror, are all different modifications of it. It particularly favours the attack, and increases the malignity of epidemical diseases, and by producing a weakened circulation of the surface, gives rise to various cutaneous affections, and other ills, as palsy, loss of speech, epilepsy, &c. The treatment under violent degrees of it should be the same as that suited to spasmodic maladies, by first removing the spasm produced, and then promoting the different evacuations that may be interrupted. The lesser passions of envy, jealousy, disappointment, fretting, &c. may be all considered as modifications of the more important ones now detailed. The general treatment of all mental disorders may be comprised under the following heads :

1st. To remove, as far as possible, the cause of the passion whenever passion is predominant.

2d. To inspire, according to circumstances, an opposite passion as a means of cure.

3d. To present the mind with a variety of scenes and objects of a different nature to that of our prevailing passion.

4th. To affect the feelings by the power of music.

5th. To attend to the state of the surface. And

6th. To observe a guarded regimen during the prevalence of any passion, in food, drink, and medicine.

A very interesting view of the passions is exhibited in Holy Writ.—That penitent passion, of conscious guilt, observes that eminent practitioner, Dr. Falconer of Bath, shame, follows the awful interrogation of the first man ; “ *Adam, where art thou?*” *Dissimulation*, a passion unworthy of a liberal mind, the result of fear combined with guilt, is immediately prominent in the assumed exculpation, “ *She gave me of the tree, and I did eat.*” The sacred historian, who lived to the age of 110, had been dead five years before the foundation of Troy was laid by Scamander, and consequently many centuries before Homer painted the Ire of Achilles, portrays the dreadful impetuosity of anger in the first born human being, who affords an example of wrath of the most implacable nature.—The religious wrath of one brother persecuting another unto murder, preceded by all the groveling suspicions of superior merit, expressed in a sullen or a *fallen countenance*, and avenged by supreme justice, in an appeal to the heart, that almost chills the blood.

"What hast thou done? The voice of thy brother's blood crieth unto me from the ground."

In the under plot of *sinister* passions, we see in a wife and parent the influence of *prejudice*, *insinuation*, and *treachery*; still further degenerating into *avarice*, in the character of one son, and pathetically contrasted in the generosity of an injured brother after the emotions of *anger* had subsided, *who ran to meet him and embrace him, fell on his neck and kissed him, and they wept*. This picture, for strength of colouring, for the chaste union of strong and tender passions, is not perhaps exceeded by any thing ever recorded.—Its force and impression are not inferior to that exhibited by the Hebrews in the Court of Pharaoh, or to the animated friendship of the impassioned Greek for his Patroclus.

OF DIET.

Diet consists in that course of eating and drinking, which every man employs for the support of life; and varies therefore with every individual, in a certain degree, according to taste and circumstances. In a medical view, however, it is proper to consider the course of diet which is best suited to each period, without regard to any thing extraneous; and in so doing, we shall here begin with that of youth, having already given that of Infancy.

DIET OF YOUTH.

The diet of children and young people should consist greatly of diluents, in order to facilitate the progress of growth. Hence broths, and a large proportion of vegetables, are the most suitable nourishment. Milk also is a proper part of diet, and it should be used in every form during this stage of life. In point of drink, water is the best, and should be almost the only beverage. Seasoning of all kinds should be avoided, and nothing should be taken that can by stimulating the system, induce a too early maturity, before the constitution is ripened for it by years.

DIET OF MANHOOD.

With complete adolescence, the quantity of food necessary for the period of growth should be abridged; but from the active scenes of life in which the body is then engaged, the food should be of a more stimulating nature, and a proper proportion of animal food interposed. The proportion, however, must be regulated by circumstances; thus, those who pursue a sedentary and studious

mode of life should be more sparing in the use of animal food, and stimulant drink; for by excess of nourishment to the body, the intellects are found proportionally weakened. Those of a firm and vigorous habit, possess a strong disposition to inflammatory diseases. Excesses therefore should be particularly avoided by them, especially in the use of fermented drinks. Where the constitution is delicate and irritable, a diet moderately stimulating is most suitable, with a very sparing use of fermented liquors. The sanguine should confine their diet chiefly to vegetable food, and their drink to water without any impregnation. The phlegmatic habit admits a greater latitude in the use of stimulant diet than any other, and both seasoning and stimulant drink will be less hurtful here than in any other constitutions; the chief point will be to guard against too great corpulency. Where a dry habit prevails, young meat with fruits, and acescent vegetables, form the best regimen; and in point of drink, the smaller wines are preferable.

On the subject of drink, at all periods of life, temperance is necessary. Strong liquors are indeed best suited to cold climates, and here they are generally used to excess. In warm climates, though their temporary use may be called for at times, the practice should not be indulged in.

DIET OF AGE.

The diet of age, or after fifty-five, should return somewhat to the early periods of life. The proportion of solid food should be lessened, and we should return to the diet recommended for youth; thus broth and liquid food should mostly be used; and all nourishment taken should be of the most digestive kind; a moderate use of seasoning is now proper. The appetite is more languid, and the machine requires to be spurred on. Fermented liquors, especially wine, are also proper, for the system must now be invigorated and supported.

DIET UNDER DISEASE.

If an attention to diet is so necessary in health, it is certainly still more so under disease, and the forms suited to the latter come next to be examined.

LOW OR FEVER DIET.

Panada; gruel; milk thickened with arrow root; plain bread pudding; arrow root, salep, tapioca jellies, rice milk; chicken or veal tea.

Drink.—Barley water, acidulated with lemon or orange whey; thin gruel; bohea, balm, or mint tea.

RESTORATIVE, OR CONVALESCENT DIET.

Rice or bread pudding; hart's horn, isinglass, or calves' feet jelly; oysters and shell fish; flounder and soles, veal, fowl, rabbit, and lamb.

Drink.—Fresh small beer; porter; port or claret wine with water; weak brandy and water.

GENEROUS OR FULL DIET.

Rice or bread pudding; strong beer; broth or gravy soup; oyster and shell fish; veal, lamb, mutton, beef, pork, &c. jelly of hart's horn, calves' feet, or isinglass; meat soups, with vegetables.

Drink.—Brisk cyder or perry; sherry, port, or claret wine; rum or brandy diluted with water.

OF DRINK.

Drink is that supply of liquid which the body requires to repair its fluid parts; and the necessity for their supply, as well as its quantity, are both pointed out by a certain feeling which the want of it excites, named thirst. From the purpose that drink is naturally designed to serve, the liquid composing it should be of the simplest and most diluent kind. Hence, water is the drink of all animals, and also of man in his natural state. But along with refinement, this part of aliment as well as food, has changed the simplicity of its nature; it has become impregnated with a variety of foreign matters, which along with dilution introduce into the body a proportion of nourishment, or stimulate the system, or in fine produce both these effects; and thus instead of answering the original intention of nature, as a pure elementary fluid, in allaying thirst, it is formed only to please the palate, frequently at the expence of that sensation, and to create a desire for the enjoyment of it, beyond what either nature or reason approve. Drinking, or rather dilution, which is a term that more properly applies to this part of the subject, we find indispensibly necessary to the support of animal life; by it alone, life can be maintained for a certain time without food, a proof that it is even more essential than food itself. The use of it however, like that of food, requires certain regulations, and we are more apt to exceed in the proportion of drink than of food. There are many people, however, who are known never to drink at meals, the time when dilution is perhaps most necessary, and even rarely to do

it on any other occasion: this is a practice by no means to be commended; but the other extreme, which is so common, should be equally avoided, from weakening too much the activity of the digestive organs. Drink, besides the supply of fluid to the system at large, in the first instance, materially promotes the solution of the food, and expedites its passage from the stomach, and its conversion into chyle; it then assists the union of this part with the other animal fluids already formed, and by giving fulness and tension, increases the activity of the general circulation. Thus it promotes the formation of blood and gives vigor and supply to the different secretions. By it, also, the consequences of obstruction are prevented, the thickening and incrustation of the blood, which naturally arises from the action of the solids upon it, are counteracted, and the tendency of the fluids themselves to generate acrimony by their stay in the body, and their influence on each other, is obviated in a great degree. Hence, water, as the basis of all drink, deserves the title of an universal remedy, more than any other substance with which we are acquainted. From this view then, how to employ or use drink properly, is a subject of the first importance, and in our conduct respecting it we must be directed by the several circumstances of the nature of our food, of the state of the season, and of our mode of life; while even the particular time also of using it, in regard to meals, as well as those restrictions specified, merit an equal share of attention. On the nature of our food, we may take notice that the drier it is, either from its quality or form, the greater proportion of drink it requires; animal food demands of course a greater quantity of drink than vegetable food. But in all cases the drink should exceed the proportion of food: this some authors have endeavoured to limit, by stating that the proportion of liquid should be double to the proportion of our dry aliment. But this will never be accurately observed, for every individual will be much regulated by inclination and habit in this respect. One thing, however, is clear, that animal food requires a greater proportion of drink than vegetables, and that water is the best beverage to conjoin with both, from its less disposition to produce acescency. The state of constitution determines a good deal our natural appetite for a large proportion of drink. Thus the phlegmatic habits have less inclination to drink, than those of the sanguine and choleric temperament. Women also have less calls from thirst than the other sex, and youth, in the same manner, less than manhood or age. The influence of the season regulates likewise our appetite in a material degree; excessive heat calls for a large supply of liquid by increasing the waste of the thinner parts of the body, and it suspends also in some measure the

activity of the gastric secretion, as the desire for solid food becomes considerably diminished; thus the inhabitants of warm climates eat little in proportion to those of colder regions; but they require a constant supply of liquid, and their desire for this knows no bounds. On the other extreme, the natives of a cold country possess a keenness of appetite, and strong desire for solid food, which unless very dry and compact, seldom excites much inclination for liquids. Hence, it is more from their pleasing the palate, than from their diluent nature, or from the real call of thirst, that much consumption of drinks in cold regions takes place. The way of life, the last circumstance taken notice of, must considerably affect the desire for drink, and that much in the same manner as the influence of the season; thus the laborious, from their exertions hastening the dissipation of the thinner fluids, require a much larger use of drink than the sedentary and inactive; and according, therefore, to the degree of exercise of the individual at different times, will the call for drink be greater, and the necessity also for this increased supply be proper. The suitable time for drinking, with respect to meals, is a part of the subject that next falls to be treated. A desire for drink is generally one of the first calls we have in the morning, and this will be properly gratified with a glass of cold water, which will give a vigor and tone to the stomach, and prepare it for the approaching meal; it will also tend to remove any viscid phlegm which may be collected upon it, and which may vitiate the appetite for the morning's repast; at first however, the feeling communicated by this beverage will be disagreeable; but if continued for a few times, it will prove a refreshing and agreeable relish. But drink before a meal has been objected to by some writers; this, however, like every general maxim, must be regulated by circumstances: if the stomach is strong and active, it will do no injury in lessening the appetite; if the stomach, on the contrary, is weak and relaxed, some indulgence of this kind may be proper in the way of cordials, to excite its languid action, and invigorate it for the approaching reception of food. The same objections have been applied to drinking in the time of meals, and no doubt it is intended by nature that the appetite for food should first be satisfied before a supply of drink becomes necessary; at the same time, drinking cannot be avoided to a certain degree, and especially in warm weather, when the power of the stomach feels languid, and the nourishment taken is not sufficiently quick in its operation to remove this; a moderate portion of drink, therefore, may at all times be conjoined with our meals. But it should be chiefly with a view rather of nourishing than repressing appetite, and therefore ought to be of a stimulating

nating nature, as a glass or two of wine, and it should also be in such small quantities as not to affect materially the distention of the stomach, or prevent the organ from receiving the proportion of nourishment it requires. Hence, liquors of an inferior degree, or a diluent nature, should be rather used to close the repast, than to interrupt the meal. When drink is used at any intermediate time between meals, the propriety of joining it with some solid food, has been inculcated by many authors. But thirst and hunger are two different sensations, and the supplying the former does not necessarily interfere with the latter: in certain cases, indeed, where an immoderate use of stimulant liquors is the consequence of a depraved mode of life, the bad effects of this practice may be somewhat lessened by such a plan of procedure. Drink, however, when left to choice, should only properly succeed a meal, and be called in to assist the progress of digestion; it should consist, therefore, chiefly of the most diluent or solvent liquors, and it should be taken only in small quantity, as the exertion of the stomach seems to require assistance. On the whole, from what has been pointed out, though drink is a necessary and essential part of aliment, it should never be carried too far either in respect to its quality or proportion, though not so hurtful as an excess of food. Yet its immoderate indulgence weakens the stomach and bowels, retards instead of hastening digestion, and by an improper dilution makes the food pass off quickly. Hence, the mass of blood is thinned by it, from wanting the due proportion and consistence of its parts, and in general, debility of the body ensues, distinguished by universal relaxation, and too copious a discharge of the different excretions. But on the other hand, though it is rare, a rigid abstinence from drink is improper; by this error the solution of the food becomes incomplete, and digestion is too much impeded; the blood and other fluids acquire a morbid consistence, becoming thick, viscid and tenacious, and the several discharges corresponding to this state are interrupted, or at best imperfectly performed.

CLEANLINESS

is the removal of every impurity from the body, whether generated by itself, and attached to the substances surrounding it, or merely affecting it by accidental contact; the want of it, is considered by many physicians as the chief cause of the diseases of the skin, among the lower classes of people, &c. This opinion is justly founded. Cleanliness is chiefly effected by simple ablution, and change of dress. The ablution of the body should be frequent and general, and not confined simply to those parts that are exposed. Of the different parts, however, the head,

face, and mouth, claim a principal regard; and also the hands, and feet. The head being intended by nature as the seat of a considerable discharge either by the use of powder in dress, or the accumulation of its own perspiration, is apt to have its excretion interrupted; it should be regularly washed, therefore, twice a week, that the pores of its surface may be opened; when by the further assistance of the comb, every obstruction and viscid particle will be removed, and the pores rendered completely pervious and free. The daily ablution of the face and hands is a practice so common as scarcely to deserve notice; that of the mouth, however, is often neglected, and it should be done after every meal, as the refuse of the food naturally settles about the teeth, and in consequence of heat and stagnation, produces putrefaction, and acts on them and the gums, occasioning tooth-ach and all its consequences. The breath also, from the same cause, is apt to acquire a disagreeable taint. In cleaning the mouth, the tongue and throat should not be forgotten; the former should be done every morning, with a piece of whalebone; after it, the throat should be regularly gargled several times with fresh water. In cleaning the mouth the chief attention has been generally paid to the teeth, and for the removal of the tartar or crust, which is apt to form on them. Every day brings forth a new remedy, either as a preventive or cure; the treatment of the teeth, however, should consist simply of washing or rubbing them with the finger, and joining occasionally to it some substance of a mild gritty nature, as the *area* charcoal, to assist it in the separation of the tartar: all stronger applications are to be made with much caution, for in proportion as they produce cleanness of surface, they injure the enamel and destroy its texture. Tooth-picks are injurious, as loosening the teeth, and producing a recession of the gums. The rubbing of a soft cloth, will generally be found sufficient to answer such purpose. Attention to the feet is no less necessary than to the parts we have enumerated. Their discharge, acted upon by heat and friction, as in warm weather, and after much walking, produces the most noxious and disagreeable smell. They should therefore be frequently bathed, and an attempt made to correct the discharge.

But besides these particular parts of the body, with many individuals an attempt to cleanliness is extended, and the body in general is every morning wiped with a wet sponge, so as to remove every impurity; a practice much to be commended, and the propriety of which is sufficiently apparent; indeed where a habit of cleanliness is once established, no rules will be necessary, as the feelings of the individual will sufficiently point out to him what is proper in this respect. The frequency in the change of dress, the other part of cleanliness we noticed, must

be entirely regulated by the materials worn, by the state of the season, and by the situation of the patient; no maxims therefore need be offered here, as every individual can easily judge for himself on this head. In the warm climates, an attention to it is carried so far, that people are in the habit of shifting twice a day; indeed, if articles of dress are once soiled, and next the skin, there is danger of absorption of their noxious matter, and their renewal, therefore, cannot be too speedy.

TEMPERANCE.

is the moderate use and enjoyment both of the necessities and luxuries of life; but here it particularly relates to what we eat or drink. It is one of those virtues which, of all others, has its own reward, for health and length of life are most frequently its attendants. Man, however, is less than any other animal inclined to observe its rules; and instinct in the brute creation, which regulates their conduct, is found superior in this respect to the boasted reason of man. Temperance is especially necessary in the case of every invalid, whose constitution is either habitually weakly, or rendered so by previous disease. Temperance, in such situations, has been often known to work miracles, and to have protracted life without inconvenience, nay, even with comfort and pleasure, to a very advanced stage. Of this the most remarkable instance is afforded in the celebrated Venetian Carnaro. Another and recent instance of the same kind is offered in the celebrated Professor Black of Edinburgh, who, though seized with a spitting of blood in an early period, by a proper attention to his mode of life, protracted it with much utility to mankind, to a very advanced period.

But though example is ever superior to precept, in the present instance it will be best to accompany it with a view of the effects of temperance and intemperance, on the conduct and constitution of mankind, as ingeniously presented at one view by Dr. Lettsom, in his *Moral Thermometer*, published in a small Tract, entitled “*The bad effects of a little Drop.*”

A Moral and Physical Thermometer;

OR,

A SCALE OF THE PROGRESS

OF

TEMPERANCE AND INTEMPERANCE.

LIQUORS with their EFFECTS in their usual Order.

TEMPERANCE.

70	WATER;	Health, Wealth,
60	Milk and Water;	Serenity of Mind,
50	Small Beer;	Reputation, long Life, and
40	Cyder and Perry;	Happiness.
30	Wine;	Cheerfulness,
20	Porter;	Strength and
10	Strong Beer;	Nourishment, when taken
0		only at Meals, and in moderate
		Quantities.

INTEMPERANCE.

	VICES.	DISEASES.	PUNISHMENTS.
10	Punch;	Sickness;	
		Puking, and	
		Tremors of the	Debt;
20	Toddy & Crank;	Hands in the	Black-Eyes;
		Morning;	Rags;
		Bloatedness;	Hunger;
30	{ Grog, and	Inflamed Eyes;	Hospital;
	{ Brandy and	Red Nose & Face.	Poor-house;
	{ Water;	Sore and swelled	Jail;
		Legs;	Whipping;
		Jaundice;	The Hulks;
40	Flip and Shrub;	Pains in the Limbs,	Botany Bay;
	{ Bitters infused	and burning in	
50	{ in Spirits;	the Palms of the	
	{ Usquebaugh;	Hands, and Soles	
	{ Hysteric Water;	of the Feet;	
	{ Gin, Anniseed,	Dropsy;	
60	{ Brandy, Rum,	Epilepsy;	
	{ and Whiskey in	Melancholy;	
	{ the Morning.	Madness;	
70	{ Do, during the	Palsy;	
	{ Day and Night.	Apoplexy;	
		DEATH.	GALLOWS.

Description of Medicine Chests, &c.

The chests are neatly made of mahogany, and the bottles of flint glass, with glass stoppers, carefully ground. The bottles and drawers have printed labels affixed to them, expressive of their contents, with a numerical reference to the first part of this work.

Of the improved Family Dispensary there are six sizes, viz.

	£.	s.	d.
First size, as described, page 3	19	8	0
Second size, do.	16	15	0
Third size, do.	12	16	0
Fourth size (with the omission of four articles, there being only nine bottles in each wing)	9	6	0
Fifth size, (eight articles omitted, there being only six bottles in each wing)	8	16	3
Sixth Size	6	8	0
<i>The Gentleman's Case.</i> —From 3 <i>l.</i> 6 <i>s.</i> to	6	6	0
<i>The Lady's Dispensary.</i> —From 1 <i>l.</i> 12 <i>s.</i> —2 <i>l.</i> 15 <i>s.</i> to	7	10	0
<i>Traveller's Case.</i> —Made for the convenience of travelling	3	10	0

The Country Clergyman's Dispensary.

This chest is made chiefly of oak, on a very economical plan, and supplied with black square bottles. It contains on the top, 4 wide and 4 narrow-mouthed half-pint bottles—7 wide and 11 narrow-mouthed quarter-pint bottles; and a drawer with six small bottles, 4 pots for ointments, and partitions for plaisters, lint, scales and weights, pestle and mortar, graduated measure, bolus knife, spatula, tourniquet, &c. &c. Containing the same number and quantity of medicines and implements as the second size mahogany Family Dispensary, £8. 10*s.*

The Sea Medicine Chest.—From 8*l.* 6*s.* to 20*l.* and upwards.

Portable Chest of Chemistry.—Furnished with different tests, for the analysis of natural and artificial products, with microscope, &c. and complete directions, from 4*l.* 8*s.* to 8*l.* 5*s.* and upwards.

Mineralogical Chest.—Containing re-agents and implements for analyzing minerals, from 3*l.* 6*s.* to 10*l.* and upwards.

PART THE SECOND.

BEING

A PRACTICAL TREATISE

ON THE

CAUSES, SYMPTOMS, PREVENTION, AND
TREATMENT

OF THE

VARIOUS DISEASES INCIDENT TO HUMAN NATURE.

PRELIMINARY INSTRUCTIONS.

As the success of practical medicine must in a great measure depend on being properly acquainted with the habits and constitution of the patient in a state of health, as well as the seat and nature of the complaint; I shall premise by way of introduction to the history and cure of diseases, such questions, the proper answers to which will put the practitioner in possession of every requisite information; and shall subjoin such remarks as will more clearly elucidate the nature of the disease, as well as the most judicious plan of treatment. It is an indisputable fact, that physicians residing in large towns, who enjoy the confidence of the public, seldom allow themselves

time to obtain the requisite information, relative to any peculiarity of constitution of the patient—his natural stamina—his habits in life—and other circumstances which might render a remedy applicable to the disease itself highly improper. Important as such information unquestionably is, it is, notwithstanding, a common practice with many physicians to limit his time with a patient to *ten minutes*; hence, with a very superficial knowledge of the real situation of the patient, and very likely at the same time perfectly ignorant of any peculiarity of constitution, or natural stamina of the patient, he will write an elaborate and mysterious prescription, and with a grave countenance give some few directions as to diet, &c. With such physicians, it is but too evident, the only object of interest is the fee! Such is the practice of those routine physicians who degrade their profession into a trade, which is comparatively more disgraceful than that of the lowest mechanic.

A person who takes upon himself the office of attending the sick should possess a humane disposition, and benevolent intentions. He should consider that his commission is of a large extent, and that it comprehends *every thing* that may in any way tend to restore or improve health. Compassion towards the distressed is a general obligation, but bears a peculiar reference to a profession whose sole employment consists in relieving a large class of the misfortunes incident to human nature. Humanity and benevolence should therefore be apparent in every part of our conduct towards the sick. We should not only possess these virtues, but exercise them in the mildest and most agreeable manner.—“Gentleness of behaviour,”

observes an elegant and humane writer, “ makes the approach of a physician be felt like that of a guardian angel, sent to afford ease and comfort, whilst the visits of the rough and unfeeling resemble those of a minister of vengeance and destruction.”

Although humanity should be the leading trait in our character, we should take care not to indulge ourselves in sympathetic tenderness to such a length as to enervate our minds, or incapacitate us in any degree to relieve the distresses that are so much the objects of our commiseration. Steadiness of character, and presence of mind, are no less requisite to form the physician. A certain degree of tenderness (observes that philanthropic physician, Dr. Falconer of Bath) is so far from being inconsistent with these qualities, that it tends greatly to promote them, by furnishing a powerful motive for their exertion ; but when carried too far, it is apt to disappoint its own purpose. It is not the least advantage that is derived from the attendance of a physician, that although he is sufficiently interested to excite the best endeavours for his patient's recovery, he is generally free from those agitations which the more immediate connection of the sick must feel in the dangerous situation of their friend, and must necessarily cloud the judgment, and embarrass the conduct of those liable to such perturbation.

We should maintain a proper degree of influence and authority with our patients, which is far from being inconsistent with sympathy and tenderness. This is requisite, that our directions may be properly regarded. If a physician loses his authority, the patient is essentially injured, in consequence of no fixed or steady plan of

treatment being pursued. Remedies are advised without prudence, and left off before sufficient trial of them could be made. These are multiplied by the officious impertinence of curiosity, which but too frequently intrudes upon the sick, under the disguise of friendship; and should the patient, from the inactivity of the medicine, be so fortunate as to escape positive injury, it often happens, that the critical moments are suffered to elapse, in which something might have been done towards his recovery.

The pleasing manner which accompanies the performance of our offices to the sick, render them doubly valuable. It augments even the efficacy of medicine, by the comfort and support it affords to the spirits, and is not less serviceable in cases wherein even a relief of the disorder is scarcely an object of hope, by reconciling the patient to his situation, which contributes above all things to soften the bed of sickness, and beyond the power of flattery, “to soothe the cold dead ear of death,” a consolation we shall all sooner or later stand in need of.

To point out, however, the line of conduct we should on all occasions pursue, would far exceed the limits of these introductory remarks.

I shall therefore briefly conclude with the observation, that our conduct as physicians should be regulated by the precepts of Christianity. Instead, therefore, of being actuated by sordid motives, we should endeavour to realize the abstract refinement of philosophers, That *we were born NOT for ourselves, and live BUT for others*. At any rate, in this case we shall, on reflection, experience the internal satisfaction of having conscientiously discharged our duty.

GENERAL QUESTIONS TO PATIENTS.

Q. Of what age is the patient? Has he prior to his present illness enjoyed good health? Is his constitution naturally good, or impaired by any irregularity?

In acute diseases, as inflammation of the lungs, pleurisy, inflammatory fever, &c. the propriety of blood-letting, its extent and repetition, as well as the use of aperient and diaphoretic medicines, must in a great measure depend on the age, natural constitution, and habits of the patient.

Q. How long has he been ill? How was he attacked? Is the complaint stationary, or is the patient worse or better, and in what respect?

In fevers of all kinds it is of great importance that the practitioner be acquainted with the stage of the disease, and whether the patient be in a convalescent state.

Diseases are divided from the *period* of their *duration* into two kinds, named *acute* and *chronic*. The period of every acute disease has been limited to within forty days; if it extend beyond that time it is regarded as chronic. The general symptoms of acute disease are a quick pulse, heat of skin, thirst, furred tongue, pain in the loins or limbs, an incapacity of attention or exertion of mind. When the system is free from fever, the disease is then of the chronic kind.

Q. Is he affected with slight shiverings (rigours)? Is he feverish? Does he complain of pain in the head or chest?

In rheumatism or cough, it is of great consequence to be acquainted with the state of the system, for in case of fever or a feverish disposition (indicated by rigours, pains in the head or chest, and quickness of pulse) the guaiac gum, and other stimulating medicines will be injurious in the former disease, and the paregoric elixir in the latter.

Rigours attendant on cough, indicate some serious mischief to be going on in the lungs. When rigours attend acute pains in the bowels, they prove that the disease is of an inflammatory nature, and not common colic. In cases of deep-seated pain, particularly in the loins, rigours denote the pain to arise from inflammation, and if the rigours continue to recur for a week or ten days after the first attack of pain, the disease is not to be considered rheumatic, but inflammatory, and that suppuration will probably take place if very active means be not taken to prevent it.

Q. Is he restless or quiet? Has he been accustomed to take laudanum? and, provided he has, in what quantity?

In chronic, and many acute diseases, a knowledge of these circumstances will determine whether laudanum may be ad-

ministered alone, or added to any other medicine, and the dose.

Q. Is he affected with heat, shiverings?

In cases of rheumatism, cough, pains in the head and bowels, these questions answered in the affirmative, prove that the disease is of an inflammatory nature, and that whatever tends to stimulate the system should be avoided, both in medicine and diet.

Q. Is he affected with pain in any part of the body?

In all fevers it is of great importance to attend to local pains; for inflammatory fever often terminates fatally, by producing inflammation either of the brain, lungs, or bowels; which by early attention may be in general obviated by the application of leeches, blisters, &c. If local inflammation should appear, during fever, in any part of the body, not necessary for life, and in which suppuration is not likely to be attended with any serious consequence, it should be encouraged by warm poultices, rather than dispersed by any cold application. When dispersion be deemed necessary, it should be attempted by extracting blood from the part, or by scarification, and if the joints be attacked, also by blistering.

Q. Is he affected with shivering fits? are they succeeded by heat and perspiration?

All inflammatory diseases are generally ushered in by the slight shivering termed rigours, which are succeeded by an increased heat of the body, and sometimes by perspiration. These symptoms occurring during inflammatory fever, or local inflammation, so deceive an inexperienced practitioner, as to induce him to consider the disease a species of ague, and thus lead to the improper exhibition of the Peruvian bark. In doubtful cases it will be necessary to inquire how often the shiverings occur, and if only once a day, at what period, how long they last, and also the degree of heat and perspiration, and if there be an evident intermission after the termination of the perspiration till the re-occurrence of the shiverings; and also if any local mischief be going on in the system, of which the shiverings may be symptomatic. The Peruvian bark, or stimulants of any kind, should not be administered in cases of shivering, until it be manifestly ague, as a considerable aggravation of the inflammatory symptoms might be thereby produced. An emetic and the saline mixture are proper in ambiguous cases till its real nature be ascertained, which a few days will decide.

Q. Is the tongue furred, and what colour? Is there a disagreeable taste in the mouth, nausea in the stomach, or loss of appetite?

These questions will determine the propriety of exhibiting

an emetic, particularly in cases of indigestion, and the commencement of fevers. The colour of the tongue in ambiguous fevers, with a declining state of the strength of the patient, will often decide its nature. Physicians in almost every disease, and particularly in fevers, examine the state of the tongue, for by it they are enabled to judge of the condition of the stomach; of thirst, or rather the occasion the patient has for drink, when on account of delirium or stupor he neither feels his thirst, nor is capable of calling for drink—from an inspection of the tongue a judgment may be formed concerning the nature, increase, and remission of fever. When the tongue is dry and covered with a dark scurf, attended with wandering of the mind and dejected countenance, there will be reason to suspect the fever to be putrid, or strongly disposed to it. When the tongue becomes moist, and the edge clean and red, the patient may be considered in a convalescent state.

Q. Is he regular in the bowels?

In all diseases it is absolutely necessary to be acquainted with the state of the bowels. In acute or inflammatory diseases, they should be kept open, and in chronic complaints, costiveness should be avoided. If purging should occur, without the aid of medicine, during inflammatory fever, it should not be checked, but moderated. Even in putrid fever, where the strength of the patient is much reduced, it is often of great service.

Q. Are the stools pale, dark, or bilious?

In jaundice, the colour of stools shews whether there be any obstruction to the free passage of the bile into the intestines. If they are dark, slimy, and offensive, it is evident that digestion does not go on well, and that there is irritation in the intestinal canal. If they are pale, it is a proof there is a deficiency in the secretion of bile.

Q. Are the stools copious, hard, or liquid; and is there any irritation at the fundament, or inclination to go to stool without being able to evacuate any fæces.

The quantity of fæces evacuated is of as great consequence as frequency, for a person may have frequent motions from irritation at the fundament, and yet not be purged. The matter evacuated is often nothing but mucus, from irritation in the great intestine, which is termed *tenesmus*, and not purging. In cases of purging it is necessary to inquire whether the stools are soft, or whether they come away in hard lumps with a quantity of slime. When the discharge consists of soft or liquid fæces, it is termed *diarrhæa*; but when it is slime, and the fæces in hard lumps, it is termed *dysentery*.

Q. Is the pulse weak, strong, quick, frequent, or does it intermit?*

By the pulse we judge of the state of the circulation, and irritability of the system, which, in all diseases, it is of consequence to be acquainted with. Celsus, who paid particular attention to the pulse during disease, cautions his readers not to place too great a dependence on it, and terms it *res fulacissima*, and long experience has rather confirmed than contradicted this opinion; for, as Dr. Heberden justly observes, without the conjunction of other symptoms of a disease, little dependence is to be placed on it. To draw an accurate conclusion from the state of the pulse during disease, we should at least have some knowledge of it when in health, for the pulse differs materially in different subjects. A *hard* pulse denotes plenitude or too great an action of the heart and arteries. A *small, weak, and soft* pulse, is generally owing to causes opposite to the foregoing. It often happens, that a pulse of this kind is attendant on inflammation of the lungs, stomach, and intestines, but in these and the like examples the *nature* of the malady, and not the *state of the pulse*, must determine the necessity of blood-letting. When the pulsations *rapidly* follow each other, it is said to be *frequent*, which may also be *full, strong, and hard, or soft, small, and weak*. When the pulsation is performed with great *celerity*, although the intervals be long, it is termed *quick*, which indicates great irritability. A *slow* pulse may, therefore, be *quick*, and a frequent pulse *not quick*; the term quick applying to the pulsation, and not to the *interval* of the pulsation, to which the term *frequent* applies. An *intermittent* is where the strokes do not follow the usual interval, and sometimes not till after twice, thrice, or four times the usual space. In some animals, this pulse appears to be almost natural, and is common to some people even in a state of health. An intermittent pulse arises from an unequal influx of the blood into the heart, from increased irritability, or disease of the organ itself. Sometimes it is produced by pressure of a tumour, or water in the chest or pericardium. It may not be amiss in this place to introduce the late Dr. George Fordyce's table of the pulse, which will convey to my readers more correct ideas on this important subject.

* The pulse is the beating or distending of an artery, from blood propelled into it by the heart. The *intervals* of the pulsations are the times when the heart itself is distended with blood.

<i>Indicates</i>	<i>By</i>	<i>It is called.</i>
1. The <i>strength</i> of the contraction of the heart.	strength,	strong,
	weakness,	weak.
2. The <i>quantity</i> of blood thrown out at each contraction of the heart.	fulness,	full,
	smallness,	small.
3. The <i>number</i> of contractions of the heart.	frequency,	frequent,
	slowness,	slow.
4. The <i>regularity</i> of its action as to <i>strength</i> , <i>quantity</i> , and <i>frequency</i> .	regularity,	regular,
	irregularity,	irregular,
	intermission,	intermittent.
5. The <i>strength</i> of the action of the arteries.	hardness,	hard,
	softness,	soft.
6. The increased or diminished <i>irritability</i> of the vessels.	quickness,	quick,
	slowness,	slow.
7. The <i>medium diameter</i> of the arteries.	dilatation,	great,
	contraction,	small.
8. The <i>quantity</i> of blood in the vessels.	oppression,	oppressed,
	smallness,	empty.

Of the various distinctions concerning the pulse, the late Dr. Heberden confined himself to the *quick* and the *slow* pulse, supposing that on *those alone, usefulness and certainty* attend. The pulse of a child should be felt whilst it is asleep, on account of its being so easily quickened by every new sensation. The pulse of a healthy infant on the day of its birth is between 130 and 140 strokes in a minute; the mean rate during the first month, 120; and rarely, if ever, below 108. During the *first* year, the limits may be from 108 to 120; the second year at 90 and 100; the third year, 80 and 100; the fourth, fifth and sixth, nearly the same as the third. The seventh year it is sometimes 72, but generally more. The twelfth about 70. In adults it is usually from a little below 60 to a little above 80. The natural pulse of some people is as low as 45.

It must be remembered, that the pulse in health varies in the course of the day. In the morning it is slow: after a full meal it is quickened 10 or 12 strokes in a minute. Even during fever it varies much, according to the state of the skin. When the skin is dry, it is often 20 or 30 strokes more frequent than when it perspires freely. Position of body also makes some difference: in an incumbent posture it is more frequent (about 5 strokes in a minute) than when erect.

When the pulse is so far accelerated as to exceed the healthy standard 15 or 20 pulsations in a minute, some disorder in the system may be apprehended. But the irritability of a child and some adults is such, that a *very slight* fever will considerably increase the frequency of the pulse when no danger attends; and as there is in children much difficulty in

counting the pulse when it is at 180 and upwards, we are better enabled to judge of the danger of fevers in them by the countenance, thirst, quickness of breathing, aversion to food, pain, and restlessness, than by the pulse.

We must take care that we are not deceived by what is termed an *oppressed pulse*, which is the effect of an overloaded state of the sanguiferous system; the heart in consequence not being able to contract with sufficient force properly to propel the blood through the arterial system. This is accompanied with other symptoms of plethora and distension of the vessels of the head and chest, occasioning head-ach, giddiness, difficulty of breathing, &c.

Many physicians make use of a watch at the time of feeling the pulse. This I conceive cannot in any instance be necessary, for it is not altogether by the number of pulsations in a given time, that we are to form an opinion, but by the manner in which they are performed. Hence the pulse of a patient with fever will be very quick for a few pulsations, then slow and languid, and at other times it will intermit; so that saying it beats at the rate of 90, or 100, in a minute, is next to saying nothing. Besides, every medical man should be able to say how frequent a pulse is, within two or three pulsations in a minute, without the aid of a watch. If he cannot, he must have benefited little by his experience. I have observed that it is the ostentatious and ignorant only, that make use of a watch in such cases. The physician should not feel the pulse of his patient, till he has been a few minutes in his company, for the agitation generally produced on his first appearance, has a great effect on the pulse.

Some farther observations on the state of the pulse, as indicating the propriety of bleeding, are made in the Appendix to the Family Dispensatory, under the head of Phlebotomy.

Q. Of what colour and consistence is the urine? Does it deposit a sediment?

When a fever is abating, and drawing to a favourable crisis, the urine generally deposits a lateritious sediment. In putrid fever it emits an offensive smell, and is often tinged with blood. In the last stage of pulmonary consumption, it is also offensive to the smell, and deposits a whitish matter. In cases of pains in the loins, the state of the urine will often determine whether the kidneys are the seat of the disease.

In hysterical affections the urine is pale and thin. In debilitated individuals it has a frothy head, which often remains a considerable time, on account of its abounding with viscid and oily particles. When the stomach is disordered, it deposits a sediment resembling brick-dust.

Q. Is he troubled with night sweats? Are they preceded by rigours and heat? What time do they come on? Are they copious, confined chiefly to the breasts; and do they smell strong?

In cases of inflammatory fevers, perspirations may be considered critical, and should not be checked, unless they are so excessive as to weaken the patient.

Q. Is the skin moist, or dry and hot?

In all fevers and internal inflammatory attacks, it is very necessary to attend to the state of the skin, for in those complaints no evacuation is of greater consequence than that of perspiration.

The evaporation of perspirable matter from the surface, is highly beneficial in case of fever, by conducting from it superabundant heat, and thus not only cools the body, but takes off restlessness.—A dry skin, on the contrary, favours the accumulation of heat in the system.

The perspiration or sweat, is very analogous to the urine, and when either of these secretions is diminished, the other is generally increased, so that they who perspire the least, make the most water, and *vice versa*.

The suppression of perspiration by cold produces plethora and its consequences, viz. fever, internal inflammation, &c. Moderate perspiration is very beneficial in promoting the health of the body, but excessive perspiration is, (unless in cases of inflammatory fever, and internal inflammation,) injurious, by debilitating the body.

Copious perspiration, attended with a sense of general lassitude, and a feeble pulse, indicates great debility or laxity of the cutaneous vessels.

Q. Does he void much urine?

An excessive evacuation of urine, like excessive perspiration, is a frequent cause of debility and emaciation of the body. In dropsical cases, it is of great consequence to know whether the kidneys perform their office, for dropsy will sometimes arise from a sluggish state of the kidneys.

Q. Is his sleep quiet or disturbed?

This question in cases of fevers, will sometimes determine whether the brain be much affected. In many diseases, by the state of the sleep, the practitioner will often be able to ascertain whether the nervous system be much disturbed, or the principal seat of the disease.

In affections of the head, the dreams and sensations of the patient during sleep will, in some degree, assist the practitioner in forming his judgment whether it arises from a distention of blood-vessels, threatening apoplexy. In cases of disturbed sleep, it will be necessary to attend to the appearance of the eyes. If the pupils be much contracted, the blood-vessels

distended, and the patient cannot bear to look at a luminous body, an inflammatory attack of the brain may be suspected.

Q. Does he breathe with difficulty?

In inflammatory fevers, difficulty of breathing indicates great plethora, or a great determination of blood to the lungs; in either case the loss of blood and evacuating remedies are necessary. In dropsy of the belly or extremities, the state of the breath will determine whether there be an effusion of serum in the chest. When shortness of breath comes on rather suddenly, attended with rigours, and the *acute* pains in the chest, termed stitches, it denotes inflammation of the lungs, or pleurisy.

Q. Is there any expectoration, and is it difficult? What appearance and taste?

In all coughs it is necessary to inquire, whether the patient expectorates, and what appearance it has. Cough generally terminates in an expectoration of a clear mucus, which has frequently a saltish taste. In *chronic* cough, the violence of the cough will, in a great measure, depend on the tenacity of the phlegm expectorated. In such cough it is of great consequence to produce a secretion of mucus, that will require little exertion to bring up. In inflammation of the lungs, it is necessary to attend to the appearance of the mucus expectorated; if it be clear, and comes up freely, it is a very favourable omen; if tinged with blood, it often indicates the propriety of bleeding. If great difficulty of breathing and cough be not attended with expectoration, the patient may be considered in great danger.

In cases of cough attended with emaciation of the body, by the *appearance* and the *quantity* of expectoration, the practitioner is enabled to ascertain whether the lungs are ulcerated. If the matter is opake, of a yellowish appearance, offensive to the taste, sometimes tinged with blood, and the patient be affected with hectic fever, or much emaciated, his case may be pronounced either pulmonary consumption, or bordering on it.

Q. To what diet has he been accustomed?

A knowledge of the mode of diet of the patient is necessary, not only to enable the practitioner to form an opinion of the nature of the disease, and its probable termination, but also to prescribe medicines, and to give instructions as to his regimen. Much, however, must depend on the *violence* of the symptoms in acute or febrile diseases, or weakness in chronic disorders.

Q. What remedies has he taken; and with what effect?

By being acquainted with what has been done for the patient, and the effects thereby produced, the practitioner has the great advantage of knowing what is left undone, and to form an opinion of the situation of the patient.

Q. Has he ever been afflicted in the same manner, and how often?

When a patient is found in an insensible state, this question put to his friends, will in some degree enable the practitioner to determine whether the disease be apoplexy, catalepsy, the stupor following epilepsy, a fit of intoxication, or swooning. If the patient has been similarly affected he has the advantage of enquiring what was then done for him.

Q. Has his countenance altered since his indisposition?

The countenance of the patient should in all diseases be particularly noticed; for in prognosticating the issue of a disease, medical men are often more governed by the countenance of the patient than any one single or even combination of unfavourable symptoms. The following description Hippocrates gives of the looks of a dying man, which, on account of having been first noticed by him, is termed the Hippocratic face. "When a patient (says he) has his nose sharp, his eyes sunk, his temples hollow, his ears cold and contracted, the skin of his forehead tense and dry, and the colour of his face tending to a pale green, or lead colour, one may give out for certain that death is very near at hand, unless the strength of the patient has been suddenly exhausted by long watching, or by looseness, or being a long time without eating." This observation has been confirmed by those of succeeding physicians.

To female patients other questions are necessary, the nature of which every female is well acquainted with, and which no sensible female will hesitate to answer fully, or to acquaint her physician without being interrogated.

If she has an infant, it will be necessary to inquire whether she suckles it herself, and how often; for many diseases arise in weakly women from suckling her infant too frequently; besides, the practitioner, in consequence of being unacquainted with this circumstance, might administer medicines which would injure the infant. In some cases it may be necessary to wean the child, either for the benefit of the mother, or child, or both.

In the diseases of children, it will be necessary to inquire,

1. *The age of the child?*

2. *Is it cutting a tooth, and how many teeth has it?*

In cases of purging or fever, this will determine whether they arise from teething. See Dentition.

3. *Is it rickety?*

4. *Does its stature correspond with its age?*

5. *Has it had the cow-pox?*

In eruptions of the skin it will be necessary to make this inquiry, as cutaneous affections resembling the itch are supposed to follow this disease.

6. *Has it had the hooping-cough, small-pox, measles, scarlet fever; and do any of those diseases prevail in the neighbourhood?*

When a child is affected with fever, it will be very necessary to make those inquiries, as it may probably be indisposition preceding some eruptive fever.

Q. *Has it a large belly, with emaciated limbs, and large joints?*

These are symptoms of great weakness, approaching to rickets, and often arise from worms. See worms.

CONSUMPTION OF THE LUNGS.

The following queries will enable the practitioner to judge whether the lungs are diseased, and in what manner, and to what extent. They will also enable consumptive patients to consult a practitioner by letter.

How long has he been affected with cough?

In what manner was he first attacked?

Is the chest narrow, or is there any malformation of the chest? Is the neck long?

Was he ever affected with tumours in the neck? and has he any disease besides that of the lungs?

Has he any reason to suspect that he inherits the disease from his parents, and what? or does consumption prevail in the family?

Does he expectorate much? Did the cough commence with expectoration, or was it dry? Is expectoration easy or difficult? Is the matter expectorated clear, opaque, ill-tasted, or streaked with blood? and does it sink in water?

Was he ever affected with a vomiting of blood?

Is he troubled with pains in the chest, and where? Can he sleep on both sides, and is he affected with palpitations of the heart?

Is he affected with shiverings and heats?

Is the pulse quick and frequent, and how often does it beat in a minute?

Is he costive?

Is his sleep disturbed, and not refreshing?

Does he perspire copiously, or is the skin hot and dry?

Is he ever purged?

Is the urine high coloured? Does it deposit a sediment on standing? And is it offensive to the smell?

Can he take in a deep breath?

Is he flushed in the face?

Do the legs swell?

Is he much emaciated? Have the whites of the eyes a pearly appearance? And is the hair of the head easily eradicated?

Is the appetite good, or is he troubled with nausea, or vomiting?

What has been done for the patient, and with what effect?

Has he been accustomed to high living, or indulged freely in the use of spirituous liquors?

If the patient be a female, other questions are necessary, with the nature of which every nurse is well acquainted. If she be a mother, it will be proper to inquire how many children she has had, and whether she has one at the breast?

We must bear in mind that all acute diseases have two stages, viz. the state in which the disease exists in full power, and when it is on the decline. In the first state, medicine will often have no effect, and all that a physician can do is to watch nature, and guard against the mischief which so often follows the officious interference of nurses. In the latter stage tonic medicines, as the peruvian bark and wine, generally prove very beneficial in hastening the recovery of the patient, and hence medicines often obtain reputation in the cure of a disease, which, had it been given in the first stage, would have been injurious. We should be very careful not to begin this restorative plan too soon, for a recurrence of the inflammatory stage is too often produced by an over anxiety to recover the patient.

There are many deviations from health to which we can give no specific name. These being of a chronic nature, the object of our treatment should be the improvement of the general health. Indeed we may generally trace them to some affection of the stomach or bowels. In such cases we should endeavour to strengthen the sto-

mach by tonic or bitter remedies, with such combinations as attendant symptoms may indicate. Thus for instance, if the patient complains of heartburn or acidity in the stomach with *slight purging*, tonic medicines, as rhatany, columbo, &c. should be taken in lime water, and if the bowels are confined, the addition of magnesia will be more proper. There are also many diseases, the treatment of which must be varied according to the state of the constitution. For instance hysteric fits, Saint Vitus's dance, &c. although generally considered diseases of debility, often occur in women, whose system is too plethoric. In such cases, instead of administering asafoetida, bark, &c. our object should be to reduce the system to a healthy standard, when the complaints generally leave the patient. On the contrary, if the patient be in a debilitated state, we must attempt his recovery by the use of tonics, combined with such medicines as are calculated to allay the perturbed state of the nervous system, as the camphorated bark mixture, No. 67. In all cases of weakness we must ascertain whether it be the consequence of any local affection of the system, which tonic or strengthening medicines would increase. For instance, pulmonary consumption, which is an inflammatory affection of the lungs, is attended with great debility and emaciation; now were we to attempt to give strength to the system under such circumstances, by tonic medicines, wine, and a stimulating diet, we should increase the general debility of the system by aggravating the disease going on the lungs. The same may be said of complaints of the bladder, diseased bowels &c. Again, great prostration of strength is produced by slight compression of the brain from distention of the blood vessels; indeed it is particularly worthy of notice,

that people predisposed to apoplexy, generally complain of debility of the system, and indigestion, in consequence of too great a determination of blood to the head; such patients, by the use of strengthening medicines, and a stimulating diet, would be rendered more weak by increasing the determination of blood to the brain: on the contrary, such patients would experience an accession of strength by the loss of blood; or medicines that would tend to unload the system. In order to impress on the mind of my readers the absolute necessity of ascertaining the real cause of the debility, before we determine on the exhibition of tonic medicines, I shall relate a case which occurred in my practice a few weeks ago. The subject, a young lady, about fifteen years of age, had been confined to the bed in consequence, as I was informed, of extreme debility. She was affected with symptoms of indigestion, costiveness, and giddiness. Under the directions of a physician of great eminence in the neighbourhood, she had been taking a cordial stomachic medicine, and a glass of port wine, four times a day, for upwards of a month, which she was sensible aggravated her symptoms. Her complaint evidently arising from distension of the blood-vessels of the head, I ordered eight ounces of blood to be taken from the nape of the neck and between the shoulders, by the operation termed cupping; which, with the use of aperient medicines and low diet, restored her to health in the course of a week.

In all diseases we must take into consideration the constitution of the patient; hence we should not confine our questions to the disease itself, but endeavour to ascertain whether the family is predisposed to any disease, as scrophula, cancer, gout, insanity, erysipelas, &c. for it fre-

quently happens, that a very slight fever or accident puts constitutional diseases into action. Hence catarrh, in a person disposed to consumption, requires more attention and active remedies, than if no such predisposition existed. Again, in scrophulous subjects, a slight bruise or strain will bring on white swelling; and in people of a cancerous constitution, a slight blow in the breast, will put it into action in that part. Such people, regarding them as trifling accidents, are apt to neglect them till they become too far advanced to be checked by art. Constitutional diseases will come into action in parts of the body without such exciting cause—Hence we should not treat as trivial, even slight pains, when situated either in the cavity of the chest or belly, or in the joints, for the most formidable disease often begins with slight pain, and had that pain been properly attended to in the commencement, much serious mischief would have been prevented. As people, particularly females, are much disposed to local diseases after the age of forty-five, in them we should pay particular attention to fixed pains after that period. In cases of deep seated pains, blisters, aperient medicines, and mercurial friction, as directed under the head of Calomel, page 31, are often necessary. We must also attend to the general health of the system, as directed above. See Scrofula, Cancer, White Swelling, and Indigestion.

Another circumstance we must bear in mind is, that many diseases, particularly those in which the nervous system is principally affected, will recur, unless the disposition of the system to the disease be effectually destroyed by a perseverance in the medicine. Hence, in consequence of a patient's discontinuing the medicine when he

finds himself well, in a few days he will experience a relapse; and because the medicine only produced a temporary relief, it is very common for them to object to a further trial of it. Now had he continued it for a little time longer, the disposition to the disease would have been entirely overcome. Of this class of diseases, are intermittent fevers, nervous head-achs, Saint Vitus's dance, insanity, epilepsy, &c.

Before we prescribe purgatives, we should enquire if the patient be subject to piles, or easily affected by such medicines. If the bowels are irritable, we should administer the mildest aperient, and if he be subject to piles, we should not employ aloes, unless it be advisable to reproduce them, for many complaints follow the suppression of them. Before we determine on the exhibition of an emetic, we should learn their general effects on the patient, for some people suffer so considerably during its operation, that in many diseases it may be productive of mischief.

A knowledge of the occupation, or mode of living both with respect to exercise and diet of a patient is also necessary, in order that we may point out the means of preventing a recurrence of the disease, when it is evidently the consequence of either of them.

As many diseases are produced by the mind, and as all are more or less influenced by it, we must also attend to the state of mind, as well as the body. In order to impress the importance of this more on the mind of my readers, I have in this edition introduced a chapter on the Passions. It is a fact, no less curious than certain, that we often meet with people who ridicule the idea of being ill, and are resolved not to submit to disease. A striking instance of this kind lately occurred within my

knowledge. The servant of a gentleman confined to his chamber by ague, was attacked with the same disease at the time he began his dinner. Determined, as he expressed himself, that "it should not conquer him," he immediately joined the other servants in getting in the harvest. By exertion he soon brought on copious perspiration, and the symptoms entirely left him. Two days afterwards, about the same hour, he was seized with violent shivering and sickness; he immediately left the table, and went to his work as before. After this he did not experience a return of the fit, although he did not take any medicine.—Three of the servants were at the same time laid up with ague. An instance of an opposite state of mind, I have noticed under the head of contagion. No medical man of any experience will doubt, that diseases are rendered more obstinate by suffering the mind to give way to them. If courage will secure a person against the contagion of infectious fevers, it is clear that mental exertion must be of great service under disease. Captain Beaver, in giving an account of a fever that prevailed in the West Indies, observes, "and what is very remarkable, not one recovered that on the first attack gave himself up."

It was my intention to have introduced in this part, the *Premonitory Symptoms* of diseases; but as they have hitherto been totally neglected by the profession, and understanding that Dr. Cheston of Gloucester intends shortly to publish a work expressly on this important subject, I have for the present deferred it.

A
PRACTICAL TREATISE,

ON THE
PREVENTION AND CURE OF THE DISEASES INCIDENT TO THE HUMAN FRAME,

WITH THEIR
CAUSES, SYMPTOMS, &c. &c.

N. B. *For the Facility of Reference, the Diseases are arranged in Alphabetical Order.*

OF AGUE.

THIS species of fever attacks in paroxysms or fits, which are followed by a clear intermission or return of apparent health, and hence is also termed *Intermittent* fever. When it returns every day it is called a *Quotidian* ague; when every other day, *Tertian* ague; and *Quartan* ague, when the fit occurs in the first and fourth days, the two intervening ones being free. It is likewise termed *Autumnal*, when it happens in autumn, and *Vernal* when in the spring. Other varieties are enumerated by authors, but as they resemble each other, both in the train of symptoms and indications of cure, and arise from the same cause, it will be unnecessary to particularize them here.

SYMPTOMS.—A paroxysm of intermittent fever is divided into three stages, viz. The *Cold*, *Hot*, and *Sweat-*

ing. The *Cold Fit* begins with a remarkable shivering, nearly amounting to a kind of convulsive shaking of the whole body, which, after continuing an hour or two, is gradually succeeded by a degree of heat, generally slow, but sometimes otherwise, with pain in the head, thirst, bitterness in the mouth, a quick pulse, which constitute the *hot Fit*; as the heat abates, a moisture is perceptible on the skin, which often increases to a profuse perspiration, termed the *sweating Fit*. The whole paroxysm generally occupies eight, and rarely less than six hours; the fever then quits the patient, and regularly returns after the periods marking its type. During the cold fit the patient is affected more or less with heaviness, pain in the head, limbs, and loins, pallid complexion, chilliness of the extremities, yawning, stretching, violent shaking, small slow pulse, thirst, retching, sometimes vomiting a bilious matter, and, during the *hot Fit*, a heat of the whole body, redness, distension of skin, the pulse quick and strong, short breath, delirium, high-coloured urine without sediment; which abate by degrees, and terminate in an universal sweat.

CAUSES.—This disease seems to be produced by the action of the effluvia arising from marshy ground; some authors have noticed as causes every thing that has a tendency to weaken the system; but these, although they may predispose the body for its reception, are not capable of producing the disease without the concurring influence of marsh miasmata.

TREATMENT.—The Peruvian bark has been so successful in the cure of this disease, that it is generally considered a specific. In all cases it will be advisable to premise an emetic of ipecacuan powder, and afterwards

to clear the intestines by a full dose of the compound colocynth pill, No. 46. From inattention to this preparatory treatment, the Peruvian bark often disagrees with the patient, either by producing nausea, oppressing the stomach, or disturbing the bowels. After the pills have performed their office, the bark powder may be administered, as directed under the head Peruvian Bark, No. 48, page 55. The Rhatany root in powder, has been found to answer in some instances better than the Peruvian bark. It has the important advantage of not oppressing the stomach, of being less liable to disagree with the bowels, and much more pleasant to the palate. It may be administered from fifteen grains to twenty-five, in the same manner as directed for Peruvian bark. See *Rhatany Root*. If purging should occur during the use of these remedies, five or six drops of liquid laudanum may be added to the dose three times a day; and in case of costiveness, five grains of rhubarb powder may be substituted for the laudanum. The diet should be generous, and the patient allowed a glass or two of port wine, every day after dinner. These directions are applicable to every variety of the disease.

In the treatment of this disease we must bear in mind that it is always more or less attended with obstruction of the viscera; indeed we cannot perhaps take a more clear view of it than to consider it symptomatic of this state of the viscera. This visceral affection is sometimes so considerable, as to render the exhibition of the bark highly improper. When therefore a yellow and bloated countenance, with a sense of fulness in the chest or belly, or pain in the region of the liver indicate the viscera to be much affected, it will be adviseable to prepare the patient for the

use of the Peruvian bark or rhatany root, by a gentle dose of jalap and calomel (see calomel page 44,) which should be repeated two or three times a week, according to its effects on the bowels, and the strength of the patient. He should also take a grain of calomel, every night at bed time for about a week, during the use of bark or rhatany root.

Arsenic is the most certain remedy for ague we are acquainted with.—It is, however, too powerful a medicine to employ in domestic practice, and should only be administered in those cases which resist the rhatany root, Peruvian bark, and mercury, as above directed, or when the patient cannot be prevailed on to give these remedies a fair trial. In very obstinate cases of ague, the use of the solution of arsenic only for one day will produce such an alteration, that it will afterwards yield to the Peruvian bark in a few days. Ague sometimes induces such a degree of debility in the system, particularly in children, as is often attended in them with such irritability of stomach and bowels, as to render the exhibition of the bark or rhatany powder impracticable. In such cases the arsenic is a most valuable remedy. About six weeks since, I was requested to see a child in Kent, in consequence of her medical attendants having pronounced her situation hopeless. She was only three years of age, had been affected with a quotidian ague six weeks, and had for the last week refused to take any sustenance but water. The Peruvian bark was the only remedy that had been tried, but it did not appear to have been given in sufficient quantity. The belly was much enlarged, and the powers of the system so much reduced, that I had little hope of her recovery. I directed half a drachm of the

white mercurial ointment (made as directed under the head of calomel page 46) to be rubbed over the bowels twice a day, and six drops of Fowler's solution of arsenic to be given in a little water three times a day. In the course of two days, she was manifestly better. On the third day she took some food, and experienced no recurrence of the paroxysm. Having a most invincible dislike both to the Peruvian bark, and rhatany root powder, the solution of arsenic was continued for three days longer, when I ordered it to be discontinued, and a clyster composed of rhatany powder and broth to be administered for a few days longer, for the purpose of strengthening the system, and preventing a relapse. After taking the arsenic solution three days, the ague entirely left her, and in a fortnight the child was perfectly well. In this instance, I have no doubt but that the arsenic and mercury saved the child's life. The best form for administering arsenic is the preparation kept in the shops under the name of Fowler's arsenical solution. The small quantity of one-eighth of a grain of arsenic being sufficient to poison an adult, it is clear, it should never be given in substance. Nor should it be continued longer than three days, if it be possible to avoid it, as organic disease of the stomach has been known to follow its use. In the first part of this work I have given very explicit directions for the use of the Peruvian bark and rhatany root, in ague (See Peruvian bark, page 55). It may not be amiss to repeat in this place, that it is absolutely necessary to persist in the use of the Peruvian bark or rhatany root powder for a few days after the ague has left the patient, and to discontinue gradually, in order effectually to overcome the

disposition of the system to a recurrence. It is also worthy remark, that when it does recur it is more difficult to cure.

Ague exhibits strong marks of the influence of the imagination and passions, numerous instances having been published of its being cured by remedies of no medical efficacy whatever, but of that odious and disgusting nature which are calculated to make a strong impression upon the senses, as live spiders, swallowed in that state, snuffs of a candle, a dried toad worn in the bosom—charms with ceremonious pomp and affectation of mystery.

The young practitioner should be careful that he does not confound the disease with the rigours or shivering which precede inflammatory fever or local inflammations, or are attendant on suppurations. Pulmonary consumption is generally attended with a fever of the intermittent type, in which Peruvian bark, or rhatany root, would prove injurious. The hasty exhibition of these remedies in cases of rigours, preceding pleurisy or inflammation of the lungs, would be productive of very serious mischief. If there be any doubt with respect to the nature of the fever, it will be prudent to postpone its use till its character be well marked.

ANGINA PECTORIS. See *Pectoral Angina*.

ANIMATION, SUSPENSION OF.

See Appendix to the first Part, Page 109.

OF APOPLEXY.

An apoplectic fit consists in a sudden deprivation of all the senses and voluntary motion, in consequence of compression of the brain; which, when produced by an

effusion of blood, or a distention of the internal vessels of the head, from an accumulation of *blood*, is termed *Sanguineous Apoplexy*; and when occasioned by an effusion of *serum*, which occurs chiefly in dropsical habits, *Serous Apoplexy*.

Of the Sanguineous Apoplexy.

This disease seldom occurs before the forty-fifth year of a person's age. The short-necked, the indolent, and such as are apt to indulge in full meals of animal food, and the free use of spirituous and vinous liquors, are generally its victims. Its frequent occurrence in this country is no doubt in consequence of the great consumption of animal food and spirituous liquors.

SYMPTOMS.—With the loss of the senses and *voluntary* motion, there is an *appearance* of *profound* and *continual* sleep, with snorting; *oppression* of the breath; the pulse of the *wrist* is languid, while the arteries of the *head* and *neck* beat with increased force; the face is red and bloated; the neck swelled, with a distention of the vessels, and *dilatation* of the pupils, of the eyes. Although the *whole* of the body is affected with a loss of sense and motion, one side, on close examination, is generally found more benumbed than the other.

These appearances, which constitute what is called the *Apoplectic Fit*, are often preceded by a sense of weight on the head, and giddiness; frequent head-achs; bleeding at the nose; redness of the eyes; imperfect vision; a noise in the ears, like the ringing of bells at a distance, or the boiling of a tea-kettle; a transitory degree of numbness, or loss of motion in the extremities; faltering of the

voice; impaired memory; drowsiness, particularly after dinner; and disturbed sleep. These affections occurring in a person of a plethoric habit and short neck, may be considered premonitory symptoms.

CAUSES.—The chief cause of this species of apoplexy is a plethoric habit of body, with a determination of blood to the brain. It may be brought on by whatever hurries on the circulation, so as to increase the *afflux* of blood into the vessels of the head*; such as *violent* exercise; passions of the mind†; intoxication‡; much straining§. It may likewise be occasioned by whatever impedes the

* The violence of the circulation into the vessels of the brain is considerably checked by the *tortuous* course of the arteries that supply it with blood, and the resistance afforded by the long bony canal through which the internal carotid artery passes: the impetus of the blood to the brain must of course be influenced by the *angle* these vessels make, which has been found to vary in different subjects. The direction of the canal admitting of too free an afflux of blood, I believe to be a frequent cause of apoplexy and other affections of the brain.

† Anger and fear, although opposite passions, are enumerated by Van Swieten, as *frequent* causes of apoplexy.

‡ When sudden death takes place during drunkenness, it must be by producing apoplexy. Among persons in the habit of drinking, fatal apoplexy is very frequent. "This disease," observes Dr. Trotter, "being so frequent an attendant or a consequence of excessive drinking, holds up a most awful warning to the inebriate." The idea of a human being rushing into eternity from a board of gluttony, riot, and intemperance, one would suppose sufficient to appal the most depraved and obdurate of mortals.

§ I have known apoplexy produced by the exertion of pulling on a tight boot, and a short time since, a gentleman was found in an apoplectic fit in his vault in my neighbourhood, brought on no doubt by the straining occasioned by a costive motion. In those instances, however, there must have been a great predisposition to the disease.

free return of blood from the head ; as a tight ligature or handkerchief round the neck ; stooping down or lying with the head lower than the chest ; looking behind, or upwards for some time.

Dr. Baillie, in his valuable work entitled *Morbid Anatomy*, observes, " When the patient is not cut off at once, but lives for some time after the attack, the palsy of one side of the body, which generally follows an apoplectic fit, happens on the *opposite* side to *that* of the brain in which the effusion of blood has taken place ; i. e. if the right side of the brain be compressed, it will paralyze the left side of the body, and vice versa ; hence it often happens, that if a person loses the use of his *right* side by compression of the *left* portion of the brain, the *right* eye will not be affected, while that on the *opposite* side will be nearly useless. Such is not, however, uniformly the case, for I have known instances of palsy of the right side produced by the rupture of a blood vessel in the same side of the brain*.

Three species of sanguineous apoplexy may be enumerated : the first arising from increased vascular tone *throughout* the system, with an *undue* determination of a rapid circulation ; the second from distention of the blood-

* Some time since, I was requested to examine the head of a gentleman who had suddenly died of apoplexy. In the right portion of the brain, there was a considerable extravasation of blood, and on the left side I discovered a tumour of a hard consistence, which proved to be the remains of an effusion which had produced an apoplectic fit about twelve months before ; a circumstance that proves that a rupture of a vessel in the brain is not always fatal, and that the effused blood is not always entirely absorbed ; he was, however, afterwards very subject to head-ach, giddiness, and drowsiness.

vessels of the brain only, and the third from *weakness* of the vessels of the brain, thereby rendering them incapable of transmitting the quantity of blood received, which gradually accumulating and distending their coats, ultimately produces compression. This last species generally affects aged people.

It is very common, on examining the brain of persons far advanced in life, to find the arteries in a very diseased state. There is often a bony or earthy matter deposited in the coats of the great, and sometimes lesser arteries of the brain*, by which they lose a part of their *contractile* and *distensile powers*, as well of their tenacity. The vessels of the brain, under such circumstances, are much more liable to be ruptured than in a healthy state. Whenever blood is accumulated in *unusual quantity*, or the circulation going on with *unusual vigour*, they are very liable to this accident; and accordingly, in either of these states the ruptures most frequently happen.

TREATMENT.—The *first*, and indeed the *principal* object to accomplish towards the recovery of a person in an apoplectic fit, is to unload the vessels of the head, by cupping or scarifying the scalp or nape of the neck, and between the shoulders; or by opening the temporal artery, which should be done as soon as possible after the attack. The extraction of blood from the jugular vein, is much recommended by medical writers; but I conceive the interruption to the *return* of blood from the head, by the ligature applied round the neck to elevate or distend the vessel,

* This diseased state of the blood-vessels of the head is, no doubt, often the cause of obstinate head-ach, lethargy, epileptic fits, and other nervous diseases in *elderly* people.

although but temporary, will certainly increase the effusion of blood in the head, in case a blood-vessel has given way; or if distention only exist, it may produce a rupture, particularly if the vein be not soon opened. Blisters should likewise be applied to the head and between the shoulders. The next object is to *lessen the determination* of blood to the head by increasing the circulation in the extremities, which is most effectually done by stimulating the feet and hands with the mustard poultice, No. 111, and by emptying the intestines by administering twenty grains of the compound colocynth pill, No. 46, dissolved in a little mint water, and by the laxative clyster, No. 97, with the addition of half a drachm of aloes and two table-spoonfuls of common salt. The body should be kept nearly in an erect posture, and the head supported in that situation, as favouring the return of blood from, and at the same time checking its afflux to the head: a napkin, moistened with cold vinegar, may also be applied to the head. The *sooner* these measures are put into execution, the *greater* will be the probability of success. It has been a question much agitated of late, whether the exhibition of an emetic is proper on the *first* attack of apoplexy: by producing an *equal* circulation throughout the system, it has often relieved *local* congestion; but the *violence* of straining, it has been said, may occasion the rupture of a distended vessel in the head; and if effusion have taken place, it may increase it. As the operation of an emetic increases the action of the absorbent vessels, it may promote the absorption of the effused blood. It is, however, at any rate, too ambiguous a remedy to adopt in domestic medicine.

If the apoplectic fit be *evidently* produced by *excessive* drinking, the contents of the stomach should be diluted

by drenching the patient with warm water. Vomiting, in this case, is always of great service. See *Treatment of the Drunken Paroxysm, in the Appendix.*

PREVENTION.—A person disposed to apoplexy, or who has experienced an attack, should be particular in keeping his feet warm, by wearing flannel socks, and the use of the horse-hair soles, which I consider an excellent contrivance to keep the feet both dry and warm*; and particularly to guard against fulness of the vessels, by moderate exercise, and by adhering as much as possible to a vegetable diet, and avoiding spirituous and vinous liquors. He should sleep with the head higher than the trunk, but not so as to bend it forward on the chest; the elevation should be *gradual* from the feet to the head. When affected with the *premonitory* symptoms noticed page 183, a brisk purge of the compound colocynth pill, No. 46, a blister to the nape of the neck or head, and putting the feet in warm water, will often obviate an attack. Snuff, by increasing the secretion of the nostrils and producing sneezing, will likewise prove serviceable. General blood-letting, having a tendency afterwards to produce plethora, should only be practised when apoplexy is *immediately* threatened—the application of leeches to the temples will often supersede its necessity. The discharge of a seton or issue in the nape of the neck, and the occasional use of the compound colocynth pill, No. 46, by preventing turgescence of the vessels of the brain, may be considered the most powerful preventive. It would also be adviseable

* These soles not being generally known, the author thinks it necessary to acquaint his readers that they may be obtained of Mr. Butts, No. 10, Berners-street, Oxford-street.

to have the head shaved, and to wash it with cold water every morning. This will not only check the determination of blood to the head, but by strengthening the vessels of the brain, will prevent turgescence. The most frequent cause of an overloaded state of the blood-vessels of the brain, I suspect to be, want of power in them sufficiently to propel the blood through the veins. A reclining posture and much sleep should be avoided, for nothing is more hurtful than too great an indulgence in bed. By a strict observance of these rules, a paroxysm of apoplexy may be kept off for a great length of time, however predisposed the person may be to the disease*.

DISTINCTION.—Apoplexy is distinguished from profound sleep, which it much resembles, by applying the smelling salt, or sal volatile, to the nostrils, which will immediately rouse a sleeping, but will have no effect on an apoplectic person; and from a fit of intoxication, by the *paleness* of the face, the *smell* of the breath, *manner of living*; from epilepsy, by the stertorous breathing, diminution of the power of volition, and *absence* of convulsions. It is often extremely difficult to discriminate between the insensible state that *follows* an epileptic fit and apoplexy, particularly as an apoplectic paroxysm is sometimes preceded by a violent convulsion, foaming at the mouth, grinding the teeth, and other convulsive motions of

* I have known several aged persons that have experienced attacks of apoplexy, procrastinate the *fatal* relapse for many years by strict attention to these preventive means. An issue in the nape of the neck, by keeping down fulness of the system and the irritability of the brain, is a most important remedy in the prevention of apoplexy.

the body ; but a knowledge of the *habits* and *constitution* of the patient, will in general enable a practitioner to determine the comatose state after epilepsy from apoplexy. The *state* of the pulse and respiration, and the *pale*ness of the face in fainting or swooning, will distinguish it from such complaints.

Of Serous Apoplexy.

Dr. George Fordyce asserts that the compression of the brain, producing apoplexy, seldom or never arises from the *serous* part of the blood being extravasated ; and adds, whether serum or blood be the cause, the same methods should be pursued for relief. When apoplexy occurs in a dropsical person, it may be referred to an effusion of serum, which, for its removal, will require the means suggested for the cure of sanguineous apoplexy, with the *omission* of blood-letting. Cordials, which, in the sanguineous apoplexy are not allowed, would in this case be very proper. It is the consequence of extreme debility of the system, and generally terminates in death.

Remarks.—In both the sanguineous and serous apoplexy, the brain is *compressed* ; in the former, by over distension of blood-vessels or effusion of blood ; and the latter by the effusion of *serum*. Another species of apoplexy, I am well persuaded, often occurs, that is not occasioned by compression but by depletion, or too empty a state of the vessels of the head ; hence the brain losing the mechanical support afforded by a proper distension of the vessels, becomes so collapsed, as to be incapable of performing its functions. This species of apoplexy often follows the excessive loss of blood. It also occurs in extreme old age,

and in people whose heart, through disease or ossification of the aorta or carotid arteries, has not the power of forcing the blood in sufficient quantity to the head.

It is of great consequence to determine, whether apoplexy is produced by depletion, for the general opinion that it is occasioned by compression of the brain, induces young or inexperienced physicians, or what amounts to the same—physicians who have not profited by their experience, of which there are unfortunately but too many—to have immediate recourse to bleeding, with the view of unloading the vessels of the brain, when at the same time they really require to be filled; hence we often find apoplectic patients suddenly expire after the loss of blood.

APHTHA. See *Diseases of Children. Thrush.*

APPETITE, LOSS OF. See *Indigestion.*

OF ASTHMA.

Asthma is often an hereditary disease, and evidently of a spasmodic nature. Persons of full habits and straight chests are most subject to it. Both youth and age are its victims; in the former, if the patient be of a scrofulous habit, a deposition of scrofulous matter often takes place in the substance of the lungs, termed tubercles, which terminates in consumption; and in the latter, it is often attended with an effusion of water in the chest. When the complaint is attended with an expectoration of phlegm, it is termed *Moist* or *Humoral*; and when with none, *Dry* or *Nervous* asthma; but it is very seldom *entirely* free from an expectoration of phlegm.

Dr. Robert Bree, of Birmingham, in a treatise on dis-

ordered respiration, divides asthma into *Continued* and *Periodical*. The Continued Asthma, as he terms it, is not entirely free from *convulsive* contractions of the respiratory muscles. The *Periodical* asthma consists in *regular* paroxysms of convulsive contractions, and is therefore usually called *Convulsive* Asthma.

Of the convulsive asthma this author enumerates four species, viz.

1st. From the irritation of *effused serum* in the lungs.

2d. From the irritation of *aerial acrimony* in the lungs.

3d. From irritation in the stomach or some of the abdominal viscera, and

4th. Dependent upon habit, and caused by sensation, after irritation has been removed from the thoracic or abdominal viscera.

This division may appear plausible to the inexperienced, but in practice it will prove of no real utility.

SYMPTOMS.—True Asthma consists in a difficulty of breathing which is more or less constant, with exacerbations towards evening or during the night, (sometimes increasing so as to threaten suffocation), with a sense of tightness across the chest, wheezing, &c. if the patient be lying down when the fit comes on, which is often suddenly, he is obliged to assume an erect posture in order to facilitate breathing, and requires a free cool air. These symptoms *gradually* abate towards morning, and the fit seems to end in an expectoration of phlegm from the lungs. For several successive nights the symptoms suffer an exacerbation; and after some days, on the expectoration becoming more copious, the *paroxysms* for a time leave the patient. The pulse is for the most part quick, weak, and small; and the urine, which, on the *commencement* of the parox-

ysm, is *pale*, on its *remission* becomes *high coloured*, and often deposits a sediment. The face is, *during* the paroxysm, generally *pale* and *shrunk*, but sometimes a little flushed and turgid. The fit is often preceded by lassitude, drowsiness, a sense of weight or pain of the head, and symptoms of indigestion.

CAUSES.—The principal causes of asthma, in England, some writers suppose to be obstructed perspiration, producing distension of the blood-vessels of the lungs. Dr. Cullen says, it depends on *particular constitution* of the lungs, and its proximate cause is a *spasmodic constriction* of the muscular fibres of the wind-pipe and its subdivisions, preventing the expansion *necessary* for a full and free inspiration. The immediate and exciting cause Dr. Dover asserts to be a determination of blood to the lungs.

Dr. Darwin was of opinion, that the humoral asthma is occasioned by a *torpor* of the vessels of the lungs, and particularly an *inactivity* of the lymphatics; in consequence of which, the lymph, which this celebrated theoretic writer supposed to be effused in the air cells, is not taken up by the absorbents. The cause of the *convulsive*, or *spasmodic asthma*, he suspects *may* arise from an affection of the liver or biliary ducts, and even a pain in a *remote* part of the system!! Few *practical* physicians will acquiesce in such absurd opinions.

Asthma appears to be of an hysterical nature—arising from preternatural irritability of the respiratory organs, and particularly the membrane lining the windpipe and its ramifications—a dense or stimulating air is under such circumstances generally the exciting cause. Hence, when the part of the earth is not exposed to the rays of the sun, and the air in consequence rendered more dense, the asthmatic

paroxysm comes on; during the day, asthmatic people therefore suffer more or less according to the degree of density of the air.

TREATMENT.—If the patient suffers by *pains* in the chest, *great* difficulty of breathing, and be of a plethoric habit, the loss of eight or ten ounces of blood, and the application of a blister over the breast-bone, or between the shoulders, should precede the internal use of medicine. Two or three table-spoonfuls of the asthmatic mixture, No. 68, may afterwards be taken *three* times a day, and the pills, No. 79, *twice* a day. In obstinate cases, half a tea-spoonful of ether, No. 14, with fifteen drops of laudanum, No. 31, may also be taken every night, and vapours of ether (evaporated in a warm saucer) inhaled twice a day, or during the fit. The pectoral plaister, No. 108, should be applied over the breast-bone, as soon as the blister is healed. The squill powder combined with ipecacuan in the form of lozenges, is a composition well calculated to relieve asthmatic or chronic difficulty of breathing, and, on account of their *gradual* solution in the mouth, will often answer better than pills. This medicine was much recommended by the late Dr. Fordyce, and a very similar one, in the form of pills, by Dr. Morton.

The objects of this treatment are, to diminish the morbid irritability of the lungs, by the counter-irritation of a blister, and to quiet the system by unloading the blood-vessels. The pectoral medicines, by promoting expectoration, powerfully tend to allay the irritability of the internal surface of the wind-pipe and its branches.

Asthmatic people should be very particular in their mode of living and in attending to the state of the stomach and bowels, so as to prevent indigestion and its con-

sequences, particularly costiveness and flatulence ; for the stomach being connected with the diaphragm, which is frequently, if not always, much affected during the asthmatic paroxysm, a slight derangement of the digestive organs will, by increasing the irritability of the system, render the person more susceptible of the exciting cause, and in this case the diaphragm and the muscles concerned in respiration, will be affected in a greater degree, and the paroxysm of course will not only continue longer, but prove more distressing. On any symptom of indigestion, therefore, the patient should empty the stomach by an active emetic of ipecacuan powder, or an aperient dose of the basilio powder, and afterwards, in order to obviate costiveness and keep up digestion, he may every morning take a wine glassful of the Epsom water, noticed in page 7, to which, in case of much flatulence*, a few grains of ginger powder, or a tea-spoonful of the compound tincture of ginger and chamomile, No. 7, may be added.

Vinegar alone, or combined with squills, (as the oxymel of squills) in the dose of a table spoonful, often affords considerable relief in Asthma, by promoting expectoration, and at the same time correcting and in some degree preventing the accumulation of inflammable air in the intestinal canal.

The decoction of the seneka root has, in many instances, proved eminently beneficial to *elderly* asthmatics ; but to *young* people it has been found too heating. By pro-

* All asthmatics are more or less troubled with inflammable gas in the intestines, the free expulsion of which uniformly affords considerable relief. The prevention of this species of flatulence therefore merits attention. See Flatulence.

moting expectoration, perspiration, and the secretion of the urine, it may be considered an important remedy in the asthma of *elderly* people, particularly when attended with a *dropsical disposition*. It may be combined with the squill in the following proportion :

Take of decoction of seneka, eight ounces ; oxymel of squills, one ounce ; paregoric elixir, half an ounce ; Hoffman's anodyne liquor, two drachms. Mix.

Two or three table-spoonfuls to be taken three times a day.

Dr. Ryan judiciously recommends the cold bath ; and Dr. Bree observes, " that there is no single remedy of more value in *all species* of asthma, during the *absence* of the paroxysm."

If the patient be in every other respect healthy, the cold bath, by diminishing the excitability of the nervous system, is often very serviceable ; but when the strength of the patient is considerably reduced, or when he is disposed to dropsy or advanced in years, the cold bath is by no means proper.

The extract of the common black henbane, combined with the nitric acid and the squill, has lately been much extolled as a remedy for asthma, and also the red sulphate of iron. But there are such *varieties* of constitutions, that a medicine which has proved highly beneficial in *one* instance, might in a patient of a different constitution prove hurtful. It is therefore impossible to lay down directions for the *medical* treatment of this disease under different circumstances. When the patient is young and plethoric, the object of treatment should be to quiet the system, to produce a determination to the surface of the body, promote expectoration, and obviate costiveness. People of

middle age, whose constitution has not materially suffered, must be more cautious in avoiding such articles of diet as are likely to disorder the stomach and bowels, or inflame the constitution; while the aged, in general, may take a more nourishing diet, and a glass or two of good wine after dinner. The principal object we should have in view, is to produce that state of system in which the asthmatic paroxysm will not run high, and which is unfavourable for its recurrence; hence a treatment in youth and age must necessarily be different, for what will quiet the constitution of a young person, such as low living, the loss of blood, &c. will render an elderly person more nervous, and of course dispose him more to the disease; while the wine and generous diet necessary to support an aged person, and strengthen his nervous system, by inflaming the constitution, would aggravate asthma in a young person.

In people advanced in life, asthma is often rendered more obstinate, either by ossification of arteries, or effusion of serum, either in the substance of the lungs, or what is termed the cavity of the chest. In such cases I have found the compound æthereal spirit impregnated with steel, a most valuable remedy, taken in the quantity of twenty to thirty drops, in a little cold water, about every six or eight hours.

REGIMEN, &c.—Errors in diet are so great a source of the inconveniences of asthmatic people, that, as I have already observed, indigestion and its consequences often appear to be the principal exciting cause of the disease. The free use of spirits, sweet wines, and new malt liquor, an indulgence in the use of tea and warm watery liquids of all kinds, are very improper and frequently act as *exciting* causes of the paroxysm. *Heavy suppers, eat-*

ing between meals, and all food of *difficult* digestion, such as smoaked meat, pastry, fat meat, raw vegetables, sallads, and *unripe* fruits; also boiled cabbage and carrots, rich soups, jellies, and sauces, ought to be avoided: They do not readily digest in the stomach of an asthmatic, but remain till a fermenting process takes place, and if not evacuated by purging or vomiting, will be productive of mischief. Intoxication and surfeit are also among the worst of his enemies; but they have so little allurements where the habit is infirm, that an asthmatic is not likely to suffer from them. See *Flatulency* and *Indigestion*.

PREVENTION.—Flannel worn next the skin, the occasional use of an emetic of ipecacuan powder, the oxymel or troches of squill, and an issue between the shoulders, or in the arm, will often succeed in preventing, and never fail to abate the violence of the paroxysm of asthma, and relieve the breathing during its absence in young or plethoric subjects. If the subject be advanced in years, or affected with swelling of the legs, an issue or seton will not be proper, as by extracting the glutenous part of the blood, it may produce dropsy of the chest. A diet *light* and *easy of digestion* ought to be adopted, as broth, light puddings, fowl, veal, &c. and a little ginger used in the beverage, to obviate the flatulent effects of vegetables: good old perry or cyder will afford the most salutary beverage.

Asthmatic people, in consequence of peculiarity of nervous system, are differently affected by the atmosphere, some breathing with ease only in pure country air, while others cannot live out of London; and I have known an asthmatic that could not continue more than a week at a

time either in the London or the country air, but breathe with tolerable freedom in the city of Bristol. Some require a free air, while others can only live in a warm room. Persons, therefore, afflicted with asthma, must consult their own feelings as to the place in which they should reside. A spacious room should *always* be preferred, as closeness* is particularly disagreeable to asthmatic patients; and when the air is too dense, he should occupy the highest room in the house. When the breathing is very difficult, the nitrous gas gradually diffused in the air of the room, as already recommended for purifying the chambers of the sick, will afford great relief, and often prevent a paroxysm. Flowers and herbs, which purify the air in the *day-time*, should not be left in the bed chamber during *night*, for reasons assigned page 102, note. He should, likewise, choose a residence adapted to the different seasons of the year. Malvern air and water, during the summer season, I have known in many instances prove so beneficial, that patients have even imagined themselves cured, and have afterwards been able to live the winter in London without experiencing much inconvenience. For the winter season, Sydmouth, or Exmouth, in Devonshire, is the best retreat this island affords.

DISTINCTION.—True asthma may be distinguished from inflammation of the lungs and pleurisy, by being *chronic*, unattended with *acute* pain or *stitches* in the chest, and free from fever. The returning of the pa-

* “The asthmatic patient,” says Aretæus, “loves walking in the open air with his mouth open, and is dissatisfied with the largest house, which seems too small to breathe in.”

roxysms *at intervals*, the sense of constriction above the chest, occasioning the patient to get into an erect posture, and to fly for relief to the cold air, will distinguish asthma from other diseases of the lungs.

OF BARRENNESS, OR STERILITY.

The causes of barrenness are very numerous, and many from their delicate nature cannot be noticed in a work of this kind. The most frequent causes are a diseased state of the ova, injury sustained by miscarriage, general debility of the system, or irregularity in the menstrual secretion.

Whatever be the cause, all that art can do is to improve the state of the general health, and to remove local obstructions. For these purposes the patient may take one of the following alterative pills every night for a fortnight:

Take of prepared calomel, seven grains; oxy-phosphate of iron, one scruple; mithridate, half a drachm. To be well mixed and divided into fourteen pills.

Three table spoonfuls of the following mixture should also be taken two or three times a day, and continued for some time after the use of the alterative pills.

Take of the foreign extract of rhatany root, two drachms; vitriolated magnesia, three drachms; aromatic tincture of rhatany, one ounce; pure water, twelve ounces. Mix.

If the patient be troubled with acidity in the stomach, two drachms of prepared soda may be substituted for the vitriolic magnesia; or if the medicine should prove aperient, the vitriolated magnesia should be omitted. After the alterative pills have been discontinued a week, cold bathing will prove beneficial. If the patient should be affected with fluor albus, the same topical management will be necessary as directed for that disease.

If the patient be of a cold phlegmatic constitution, instead of the mixture prescribed above, the following will prove more beneficial in giving strength to the system.

Take of muriatic tincture of iron, one drachm; decoction of rhatany root, six ounces; compound tincture of do., one ounce. Mix.

Three table spoonfuls to be taken three times a day. The alterative pills, without the oxy-phosphate of iron, should also be taken as directed above.

The same rules as are given in cases of indigestion with respect to diet and exercise, should be strictly attended to by the barren lady.

If the cause be either general debility, irregularity of the menstrual evacuation, or an unhealthy state of the womb or ova, this treatment will probably remove it. When the cause is tumours or contractions, surgical aid will be necessary.

OF BILIOUS AFFECTIONS.

It is a prevailing practice with most medical men, to attribute all disorders of the digestive organs, and even complaints of the head, to a redundancy of bile in the stomach; a doctrine evidently founded in error, and first broached by designing and illiterate quacks, that they might the better impose their antibilious medicines on the credulous public, which they have but too successfully done, to the irreparable injury of those who have suffered themselves to be duped by their artful addresses. No secretion in the human body is more regularly performed than that of the bile, or less disposed to be vitiated; and were it not disturbed by the action of strong cathartics (generally composed of mercury) taken for the purpose of carrying off a supposed accumulation, it would continue

healthy, and in due quantity. The biliary duct, for conveying the bile from the liver and gall bladder, terminating in the intestine, the bile cannot get into the stomach, unless forced into it by the pressure of the abdominal muscles, &c. during vomiting, or by a reversion of the peristaltic motion of the intestines, the latter of which very rare happens. When the flow of the bile to the intestines is obstructed by concretions lodging in the biliary duct, or by spasms, it is taken up by the absorbent vessels and conveyed to the mass of blood, and the white of the eyes and skin are in consequence more or less tinged with a yellow hue. The bile passing off by the kidneys, the *urine* becomes strongly impregnated with it, and the *fæces*, being thus deprived of it, are of a *light clay colour*. See *Jaundice*.

It is a common practice to have recourse to an emetic for the purpose of relieving the stomach of an accumulation of bile. During the operation, the liver being compressed by the action of the abdominal muscles, a quantity of the bile is forced into the intestines and from thence into the stomach, which on being brought up, the patient is led to suppose that it was in the stomach prior to the taking of the emetic. The matter however *first* vomited up being evidently acid, is an indisputable proof that at the time of taking the emetic there was no bile in the stomach. The bile is also the *last* thing ejected. The advantage therefore arising from an emetic in those cases, is not by evacuating bile from the stomach, but by producing a greater flow of it into the intestines, rousing the action of the liver, and cleansing the stomach of slime and acid matter. In cases of indigestion there is generally a *deficiency* of bile, through a sluggish state of the liver; yet

it is very common for such patients to complain of a perternatural collection of the bile, although the reverse is in reality the case. Hence, medicines which approach near to the chemical properties of the bile, uniformly give relief in those cases, and which are therefore more entitled to the term *bilious* than *anti-bilious* medicines. See *Indigestion*. When a redundancy of bile is evident from *bilious* stools, the diluted vitriolic acid, by decomposing it, will afford a safe and efficacious remedy, while the brisk cathartics of aloes and calomel, only give temporary relief, and increase the cause; but when a redundancy or deficiency of bile exists, it should not be treated as a *primary* affection, but considered as a *symptom*, or the effect of some disease, in which the strong cathartic medicines, or the *anti-bilious* nostrums of illiterate quacks, may do irreparable mischief. In the second edition of this work, published about seven years ago, I particularly remarked that the complaints of the stomach and bowels, generally ascribed to a *redundancy* of bile, arose from a *deficiency* of that secretion; and that such was the importance of a *due secretion*, that good chyle could not be formed without it, and that a copious secretion of course contributed more to the health of the body than otherwise, which is evinced by the fæces of people in perfect health being tinged more with bile than those of the valetudinarian*. This opinion has since been broached by Mr. Abernethy, Dr. Webster, and Dr. Curry. Mr. Abernethy supposes that many

* Such patients are uniformly troubled with flatulency, acidity in the stomach, colicky pains, nausea, loss of appetite; in the cure of which a German physician has acquired great celebrity by exhibiting the inspissated bile of an ox.

constitutional diseases, such as cancerous tumours, white swellings, &c. &c. originate from this source, and proposes to cure these affections by such medicines as are calculated to increase the biliary secretion, and strengthen the digestive organs.

Mr. Eaglesfield Smith, in *Some recent Observations and Experiments on the Digestive Powers of the Bile in Animals*, asserts that the bile is the principal agent by which digestion and the formation of chyle are effected. The bile, however, not being poured into the stomach, cannot, as this author supposes, be the chief agent in dissolving the food, but after the solution of the aliment in the stomach, which is effected by the gastric juice, it is no doubt necessary to form good chyle. The bile, therefore, instead of being an “intestinal enemy,” as it is termed by empirics, may be deemed a great promoter of the health of the body. See *Indigestion*.

By the change from a cold to a hot climate, all the secretions of the body are increased; that of perspiration and the bile peculiarly so; and the latter in consequence rendered more acrid. Hence Europeans on their arriving in the hot climates are very subject to redundancy of bile and disease of the liver. A continued exposure to the effects of heat at length induces a different state of the frame; the digestion becomes impaired, the appetite irregular, and the secretion of bile is at times suspended and at others increased, and probably possessing an acrid quality. The gastric secretion is also vitiated. These effects sooner or later occur, as the person indulges himself in the use of spirituous or vinous liquors.

Such a state of health being brought on by residence in hot climates, and also being met with in our own country,

occasioned by excessive stimulation from other causes than heat, leaves us at a loss how much to ascribe to the effect of a high temperature; the more so, that few reside in those countries without combining the application of both these hurtful powers. When the constitution has not been injured by excess in the individual, or the effects of it entailed by his progenitors, it is probable that the order of things, which has rendered an intercourse between different climates necessary, has in the œconomy implanted the power of making the change without the sacrifice of the blessings of healthful existence.

To such patients as are affected with a torpid state of the viscera and vitiated secretions of the bile and gastric juice, in consequence of residing in a hot climate, or the abuse of spirituous or vinous liquors, the following medicine will prove an admirable restorative :

Take of extract of rhatany root, one drachm; vitrioled magnesia, two drachms; aromatic tincture of rhatany root, six drachms; pure water, six ounces. Mix. Three table spoonfuls to be taken three times a day.

Malt liquor is peculiarly injurious to such patients; and spirits, however diluted, uniformly have a most injurious effect on the gastric secretion. Melted butter, pastry, &c. should also be avoided.

Mercury is become so fashionable a remedy in consequence of the prevailing practice of referring all complaints to a diseased state of the liver, that it is necessary to caution my readers against its too free use. A little mercury (in the manner directed for Indigestion) is no doubt very efficacious in removing obstructions, not only of the liver, but of the other viscera of the belly, as well as the chest. It also corrects other secretions as well as the bile. By

continuing its use till the mouth is affected, under the supposition that there is some organic disease of the liver, it has been productive of the most serious mischief. Some physicians suppose that the salutary effects of mercury cannot be permanent, unless the patient be slightly salivated; and although they must daily witness the injurious consequences, yet so blindly attached are they to their own opinions, that nothing can induce them to abandon them. If the remedy happens to cure one patient, and kill twenty, the successful instance is the only one that will be brought forward in support of his favourite opinion. In the early part of this year, I was requested to see a gentleman who had been taking mercury by the direction of a physician in London upwards of two months, for a diseased liver. His wife informed me, that for the last month his health had rapidly declined, and which they both attributed to the quantity of mercury he was daily taking. The unfortunate man was no longer capable of telling his own story. He was then in a dying state, and expired the same night. I opened the body the following day, but was not able to discover any thing like disease, either in the liver or any other part.

Other instances of the pernicious effects of mercury, such as insanity, disease of the jaw-bone, apoplexy, &c. I could here introduce; but this case is sufficient to prove, that long perseverance in the use of mercury is very hurtful, and can only be necessary where there is a very formidable disease to overcome; and even in that case, that its effects on the constitution must be attentively watched, that the patient may not sink under its influence.

OF BLEEDING AT THE NOSE.

A spontaneous discharge of blood from the nose, in young people, arises from a plethoric state of the *arteries*; and in people far advanced in life, from plenitude of the *veins* *. The discharge of blood from the nose, is in general confined to one nostril; it occurs for the most part in warm weather, and is generally preceded by head-ach, redness of the face and eyes, noise in the ears, giddiness, frightful dreams, coldness of the extremities, &c.

TREATMENT.—In young people bleeding at the nose may be considered a slight complaint, and scarcely worth notice, unless the discharge be profuse. If the patient be of a full habit, and his strength not much reduced by the evacuation from the nose, the loss of blood from the arm will be proper, as well as the occasional use of the aperient mixture, No. 62, or the neutral purgative salts, No. 2. After due evacuations from the bowels, the cooling powders, No. 89, may be taken two or three times a day, in *cold* water. Vinegar, diluted with water, should also be applied *cold* to the nostrils, and if these means fail to stop the bleeding, a dossil of lint moistened with vinegar may be introduced up the nostril, which, by coagulating the blood, and *compressing* the ruptured vessel, generally succeeds if properly managed. The person should be kept in an erect posture, and the patient exposed to a *cold* air, and every thing avoided that is likely to irritate the part, such as blowing the nose,

* This is not always the case, for I have observed, that the blood discharged from the nostrils and the lungs of elderly people is generally arterial.

speaking, &c. The diet should be *low* and *taken cold*, and the extremities kept warm. If it arises from suppression of the menstrual evacuation, which in young women is frequently the case, aloetic purges should be employed, and the legs frequently immersed in warm water. When attendant on *putrid* fever, it happens from the *weak state* of the vessels, and should be stopped by the compressive means suggested above. When it occurs in *old age*, and is preceded by head-ach, drowsiness, and redness of the face, it should be considered a premonitory symptom of apoplexy, and the preventive means already recommended for that disease should be immediately resorted to.

Whatever will produce rigours, or slight shivering of the body, as a cold key to the back, sprinkling the face with cold water, &c. will often speedily check the flow of blood from the nose and other parts of the body.

Such as are subject to this complaint ought to be particular in keeping their feet warm, and in obviating plethora by moderate exercise and spare diet, and the frequent use of the Epsom, or Rochelle salt, No. 2.

In cases of bleeding of the nose, the first point to determine is, whether it be of a salutary nature, which, in cases of ambiguous fever, is often extremely difficult to decide. I have known fevers, pronounced by physicians of eminence to be putrid, suddenly terminated by a spontaneous discharge of blood from the nostrils, which at the time it happened, was considered a most unfortunate occurrence.

OF BLOOD, DISCHARGED FROM THE URINARY PASSAGES.

This is a *symptomatic* affection, and considered merely as a bleeding, is seldom dangerous. The cure of course will consist in the removal of the *primary* complaint.

It may, in general, be relieved by drinking weak mucilaginous liquors, as linseed tea, or a decoction of marsh-mallow root, with the almond emulsion. If attended with *plethora*, the loss of blood from the arm, and the use of an aperient medicine, such as castor oil, No. 3, should not be omitted. The saline purgatives are here less proper, on account of their rendering the urine more irritating. The diet should be low; unless the patient be much reduced, or the discharge of blood arises from ulceration in the kidneys or bladder. In all cases stimulants, as pepper, salt, &c. should be avoided.

When it is occasioned by the *mechanical* action of a stone in the bladder, or gravel in the kidneys or ureters, it will require the treatment recommended for these complaints. When ulceration is the cause, (which is known from its being attended with a discharge of matter) spirit of turpentine, in the dose of twelve drops, in marsh-mallow root tea, has generally a very happy effect. Bear's whortleberry, in those affections of the bladder and kidneys, has proved particularly serviceable, and is the only astringent that can with safety be employed. Half an ounce of the leaves may be infused in a pint of boiling water for six hours, and a wine-glassful of the strained liquor taken about three times a day, with the spirit of turpentine, in the dose above directed.

The Lichen-Islandicus, with the spirit of turpentine, as

above directed, I have lately found very beneficial in chronic diseases of the kidneys and bladder. A quarter of a pint of the decoction of liverwort should be taken three times a day. See Decoction, No. 117, page 80.

BLOODY FLUX. See *Dysentery*.

OF BOILS.

Boils may be always considered symptomatic of what is termed a bad habit of body; their suppuration should therefore be promoted, either by the application of the gum-plaster, No. 59, spread on leather, or the poultice, No. 112; and in case of their being painful, they may be fomented with a strong decoction of poppy heads. After they break they require only to be kept clean, and defended from the external air by a mild poultice, or little diachylon plaster, or spermaceti ointment, till they are healed. An alterative dose of Epsom salt, No. 2, as directed page 8, should be taken every morning, or an aperient powder of calomel and jalap, No. 27, or the basiliac powder, No. 26, about twice a week, for at least four doses; and if, after their suppuration, the patient should be much reduced, the tonic mixture, No. 77, will have a good effect in strengthening the system, as well as correcting the constitution. The occasional use of the aperient sulphureous water, No. 2, will prove the best preventive.

If the person labours under any other disease, the above *topical* management of the boil or boils may be adopted; but the constitutional remedies must, of course, depend on the nature of his other complaints.

OF BOILS OF THE GUMS.

CAUSES.—Boils of the gums are the consequences of a fit of the tooth-ach, cold, external violence, and a partial disease of the jaw-bone and decayed teeth.

TREATMENT.—When the boil arises from a carious tooth, its extraction is necessary; and when, from other causes, suppuration may be promoted, by the application of a roasted fig; and after the matter is evacuated, the mouth should be frequently rinsed out with the acidulated gargle, No. 93, or the tincture of the rhatany root, diluted with water, as directed page 98.

OF BURNS AND SCALDS.

Slight burns or scalds may in general be cured by the liniment, No. 104, or lotion, No. 102. If the person be of a plethoric habit of body, or the system become feverish, however trifling the accident may be, it will be most prudent to empty the bowels, with either the aperient mixture, No. 62, or the neutral salts, No. 2, and to keep the system quiet by the saline mixture, No. 78. After the operation of the aperient medicine, five or six drops of laudanum, No. 31, may be added to each dose of the saline mixture, particularly if attended with much pain, or the mischief be extensive. A low diet is necessary till the inflammatory symptoms have subsided, when the usual mode of living may be gradually taken to.

I would advise this treatment to be adopted when the mischief is not very extensive, for if the constitution should sympathize with it, the cure will afterwards depend on the habit of body of the patient. From inattention to this con-

stitutional treatment, trifling accidents are often productive of the most serious consequences.

Sir James Earl, in a late publication on burns and scalds, recommends the parts to be immersed in cold water as soon as possible, which affords instantaneous relief, and if kept a few hours in that situation, will recover the part provided the mischief be not considerable. Others recommend the application of stimulants, particularly the oil of turpentine, which, in many instances, I have known to prove very beneficial.

When the injury is extensive or deep, mortification may always be apprehended, whether the subject be young or old; the advice, therefore, of a skilful surgeon should be resorted to without delay.

OF BRUISES AND SPRAINS.

In cases of violent sprains, the prevention of inflammation of the part should be attempted by the application of leeches, and afterwards the discutient lotion, No. 102, to which may be added, if attended with much pain, half an ounce of laudanum, No. 31. The aperient mixture, No. 62, should be taken occasionally, and the saline mixture, No. 78, if fever intervenes. If leeches cannot be readily procured, and the inflammation runs high, the loss of eight or ten ounces of blood from the arm will be proper. A low diet should be strictly observed till the first or inflammatory symptoms have subsided.

Superficial bruises may generally be cured by the application of opodeldoc, No. 5, or the discutient lotion, No. 102, with the use of the aperient salts, No. 2, or mixture, No. 62; but if the part has sustained much injury, mortifi-

fication may be apprehended, which in an elderly person may terminate unfavourably; such a case should therefore be referred to a practitioner in surgery.

The directions given for the prevention of sympathetic fever, in cases of Burns and Scalds, equally apply to Bruises and Sprains.

OF CANCER.

This disease was termed by the Romans *lupus*, because it eats away the flesh like a wolf. Every part of the body is subject to it, but the glands are most so. It is distinguished according to its stages, into *occult* and *open*; by the former is meant its schirrous state, which is a hard tumour, sometimes remaining in a quiet state for many years. When a more active inflammatory action commences in it, it is attended with frequent shooting pain; the skin that covers it becomes discoloured, and ulceration sooner or later takes place, when the disease is denominated *open* cancer. The cancerous ulcer is characterised by callous, ragged, and unequal edges, and a kind of burning pain, a thin dark coloured foetid ichorous discharge, often so acrimonious as to inflame, excoriate, and frequently to destroy the surrounding skin. From the destruction of the vessels there is sometimes a considerable discharge of blood.

This disease rarely occurs in the female till after the cessation of the menses, and it has been observed that antiquated maids are most subject to it; next to those, mothers who have not suckled their children; then the barren women; and the least so are those women who have borne children, and nursed them with their own milk.

CAUSES.—With respect to the *causes* of cancer, a va-

riety of opinions has been maintained by practitioners of eminence.

Some contend that it arises from a general disorder of the system, and others that it is in its infancy entirely local, and that the constitution is contaminated by an absorption of the virus from the open cancer. It is often excited by blows and accidents, and therefore more frequently occurs in the parts of the body most exposed to them, as the breast and lips.

Dr. Lambe, in a late publication, on the Causes of Constitutional Diseases, attributes cancer to the action of a salt, which the Doctor terms septic poison, introduced into the system by the use of common water. Dr. Trotter is of opinion that it may be produced by the excessive use of ardent spirits. But were these capable of producing cancer, this formidable disease would indeed be a common occurrence.

Dr. Adams is of opinion, that schirrus or cancer is an independent life, and that the tumour is a congeries of hydatids.

Mr. Carmichael, an eminent surgeon in Dublin, in a late treatise on cancer, is also of opinion, that it possesses a vitality *independent* of the system in which it grows; that it is in fact a parasitical animal, not introduced from without, but produced by what he terms the congeries of the organic particles, in a manner similar to the generation of the fungus of the bark of decaying trees, by a kind of spontaneous or equivocal generation, and not by vital reproduction. Instead, however, of considering, as Dr. Adams has done, the cysts that are observed in cancer as the parasitic animal, Mr. Carmichael maintains that it is the firm white ligamentous bands interspersed among the

cysts, and extending like roots into the neighbouring substance, (which are considered by most anatomists as merely condensed cellular substance) that make the essential part of cancerous tumours, wherever situated, and this appears to me to be the most rational hypothesis.

TREATMENT.—The grounds on which Dr. Adams supports his arguments in favour of the *independent* life of cancer, led Mr. Carmichael to conclude, that if the vitality of those supposed animals was destroyed, they would be detached from the body by suppuration; and as the saline preparations of iron have been known to be very effectual in destroying intestinal worms, he thought it might be equally destructive to other animals of the same parasitical nature: he, therefore, made a trial of these preparations of iron, the effects of which he states answered his expectation. This author first prescribed the rust of iron to be taken in the dose of twelve grains every six hours, which was gradually increased to half a drachm; and as a lotion for the part, a saturated solution of the acetite of iron. The author enumerates several cases of cancerous ulcerations, (one of which was situated in the breast of a woman) in which this medicine proved successful; and to satisfy the minds of practitioners that they were real cancerous affections, he thought proper to request the attendance of Doctors Toole and Gahagan, and the surgeons of St. George's Dispensary, in Dublin, who assert, that there was no doubt of the cancerous nature of the disease.

Mr. Carmichael was led from the consideration that iron in the blood is united with phosphoric acid, to try the effects of the phosphate and oxyphosphate of iron; and he alledges that he has found those preparations infinitely

more efficacious than the other salts of iron. He directs the surface of the ulcer to be sprinkled with the phosphate of iron, and afterwards covered with lint, and the oxy-phosphate to be administered, from five to ten grains and upwards, made into pills with conserve of hips, two or three times a day.

Dr. Barlow has published the particulars of an obstinate case of cancer of the breast, in which this treatment proved successful; and Mr. Allard, an eminent surgeon in Bristol, informs me that he has found it answer in a very extensive cancerous ulceration of the arm. Mr. Carmichael has lately published several cases of cancer in which the external and internal use of these remedies proved completely successful.

Since the publication of the last edition of this work, I have had repeated opportunities of giving the different preparations of iron a fair trial in cases of cancer; and the result leaves no doubt in my mind, but that this disease may be cured by a proper perseverance in the use of these remedies. More attention to minutiae in the topical management of the ulcer is necessary than is generally considered. The remedies also require to be combined with such medicines as the state of the general health may indicate, but care must be taken not to employ such as will decompose them.

Mr. Samuel Young, in a work entitled "An Inquiry into the Causes and Action of Cancer," proposes a radical cure by natural separation. "We have daily experience, says Mr. Young, that this is the mode by which nature throws off a part that is become useless to the purposes of life; and we know that such separations can be effected in parts the most healthy, by exciting in them

an action beyond their living principle to support." Clear and evident as this principle is, and plausible as the means of cure may appear, when applied in practice, numerous difficulties I apprehend would arise in effecting the separation. In many instances, instead of completing that purpose, the attempts to produce the necessary excitement may fail, and the very means probably become new causes of irritation: or, on the other hand, the morbid alteration, in many instances, may so far be extended as to confound parts, the regular existence of which may be necessary, even to life, and where of course the consequences of separation would be fatal. Arsenic is the principal medicine recommended by this author as a topical application, to produce an increased excitement of the part, which is well known to be the basis of Plunket's remedy. It does not appear that the means suggested by the author have been tried with complete success, even in his own practice. On the nature of a disease so formidable and so little determined as cancer, *any* opinions are, however, more or less important; and it is possible, as the author justly observes, that even error may in some way tend to aid the progress of inquiry.

Dr. Lambe, in his late *Inquiries into the Causes of Constitutional Diseases*, attributing cancerous affections to the action of a salt, which he names septic poison, introduced into the system by the use of water, proposes to cure the disease by confining the patient to the use of water deprived of this deleterious impregnation by distillation, and to a regimen of vegetable productions; and it appears, in several instances, this plan has proved highly beneficial. The employment of water thus purified as a common beverage, and in every article of diet in which

water is necessary, as broth, soups, tea, &c. with a strict adherence to a vegetable diet, has certainly a very powerful effect in improving the constitution of cancerous patients, which is not only manifested by the countenance of the patient, but by the digestion being better performed, and the dark colour and offensive smell of the fæces being gradually corrected.

When the system has not given way to the disease, this alterative diet may prove a powerful auxiliary to the medical treatment of the preparation of iron, &c. but it too frequently happens, that the disease has made such inroads on the constitution, and the digestive organs are so impaired, that the patient would suffer much by being deprived of animal food.

It has been supposed that distilled water cannot be more pure, or possess any advantage over water that has been filtered. This idea is however very erroneous; for whatever water may contain in a perfect state of solution, it cannot be deprived of by filtration, but may be effectually so by distillation; hence we find the water that has been passed through a filtering stone, on being distilled, will leave a very considerable residuum, which in a day or two becomes extremely offensive, particularly that of the New River or Thames.

Prepared natron has been also recommended as a remedy for *occult* cancer. I have given this article a trial in several cases of schirrous tumours, and where the patient has persevered properly in its use, it has never disappointed my expectation; and its failure in the practice of others, I am inclined to believe, has been in consequence of its not having been given in sufficient quantity, or of being discontinued before it could possibly have pro-

duced a favourable change in the system. Instead of prescribing it in the dose of a few grains two or three times a day, as is the usual practice, the patient should take a wine glassful of a strong solution of it in water three or four times a day; so that in the course of twenty four hours, two drachms of the salt be taken. The medicine is mild, and if the system be not well saturated with it, it cannot be expected that any real advantage can be derived from it in so obstinate a disease.

Hemlock, both externally and internally, has been much extolled by Dr. Stoerk, of Vienna, as an infallible remedy for cancer; and it appears by his reports that it has effected a cure in many obstinate cases. From the many trials I have known made with it, many of which were in incipient cases, I am persuaded it never succeeded in the cure of real cancer. It is, however, generally prescribed by surgeons who rank high in the estimation of the public, although they admit the only benefit they have known it to produce was a mere mitigation of pain! As a palliative it is less efficacious than opium, and far more injurious to the constitution. There are a set of routine practitioners, who become indifferent to the improvement of the healing art, after they have established their own reputation.

Mr. Abernethy, in a late publication, under the title of "*Disorders of the Health*," ascribes a number of local morbid actions in the system (among which schirrous tumours and cancer are noticed) to a disordered state of the digestive organs, and particularly to a deficiency or unhealthy secretion of bile. He proposes, therefore, to cure schirrous tumours by the use of small doses of mercury, which he directs to be taken every other night, for the purpose of promoting the secretion of the liver, (the

bile,) and with the view of strengthening the digestive organs, to take a quarter of a pint of the decoction of sarsaparilla root three or four times a day. Mr. Abernethy, who is by no means a sanguine practitioner with respect to the efficacy of medicine, assures me that he has found this practice to succeed in several very obstinate cases. This practice is by no means novel; for in the Medical Observations and Inquiries, many cases of cancer, and particularly of the womb, have been stated to have been cured by the use of Plummer's pill, and decoction of sarsaparilla, the basis of the former of which is mercury; and Dr. Haighton, in his Lectures on the Diseases of Children, fifteen years ago, recommended a similar practice. When we consider the mutation the body is constantly undergoing, we must allow its health must in a great measure depend on a proper digestion of our aliment, and the consequent formation of good chyle; for if the food be not properly digested, good chyle will not be formed, in which case we must expect morbid actions to take place in the system. By promoting digestion, we likewise produce an healthy action of the system, which will powerfully counteract any morbid disposition; the salutary effects of mercury and sarsaparilla, however, in such cases, few medical men will attribute solely to their operation on the digestive organs.

— For the purpose of producing a separation of the disease in open cancer, a composition of arsenic has been very successfully used under the name of Plunket's remedy. Mons. Salmade has published a case of cancer, in the Memoirs of the Medical Society of Paris, which resisted the ordinary modes of treatment, and was afterwards cured by repeated applications of the caustic

powder of Rousselot*, made into a paste with water, and laid on the surface of the ulcer for twenty-four hours at a time; it was repeated after the interval of a few days, till the diseased parts sloughed off, and the sore put on an healthy appearance.

The application of fixed air, and poultices made of oatmeal, charcoal powder, and beer grounds; and also turnip and carrot poultices, have been found to destroy the offensive effluvia of cancerous ulcers, and in some degree to assuage pain.

Cancer of the womb, although we hear much of it in practice, I believe to be a disease of very rare occurrence. I have opened many patients whose death was attributed to it, but in no instance did the parts exhibit the true character of cancer. This disease, to which females after the period of the cessation of the menses are very subject, is, I am persuaded, generally of a scrofulous nature, and by proper management in their commencement might easily have been cured; but unfortunately females seldom make their complaints known to their medical friends, till they experience the pain and inconvenience occasioned by inflammation, and the consequent formation of matter in the walls of the womb, or its appendages. I lately published a very interesting case of this disease, with the appearances exhibited on dissection, illustrated by a drawing, in the Medical and Surgical Spectator. (See Menstruation, cessation of).

* The composition of this powder is as follows:—Take of cinnabar, one ounce; Dragon's blood, half an ounce; oxyde of arsenic, half a drachm.

CARBUNCLE

shows at its commencement much the appearance of a common boil; but it soon puts on appearances which point out the malignity of its nature. The redness and hardness extend themselves very wide; though the tumour is raised very little above the level of the skin, small pustules come out on the surface, which have the appearance of being only superficial; but the openings which they leave evidently reach to the large mortified base which possesses the place of the cellular membrane. About the middle of the tumour, the colour is of a deep crimson, inclining to purple, becoming pale and mottled towards the circumference; the surrounding teguments are generally found, by pressure, to be in an œdematous, or dropsical state. Several of these tumours sometimes appear at the same time, but most commonly a single one occurs, which spreads to a great extent.

The cure of this disease is a matter of great uncertainty, from the state of body with which it is accompanied; bark, wine, and acids are to be liberally employed, and whatever can correct the putrescent tendency of the habit. The best topical applications are fomentations, yellow basilicon, poultice of charcoal, and watery solution of opium. The great danger is of its being mistaken at first for a common boil, and its being allowed to make such progress before the mistake is discovered, that the treatment has no chance of succeeding, or the life of the patient of being saved.

OF CATALEPSY.

This very extraordinary disease attacks in fits at irregular intervals, which generally last only a few minutes, but sometimes continue two or three days, when it is termed by the ignorant a *trance*. It is seldom succeeded by any derangement of the system; the patient after falling suddenly down, remains senseless and motionless. The limbs will readily admit of being moved, and continue in the position they are placed in till the termination of the fit. Although all the senses seem entirely suspended, yet he will swallow with avidity any liquid put into the mouth. The countenance is florid, the eyelids remain open, and the eyes seem fixed on some object. Sometimes there is a grinding of the teeth, and discharge of tears. The fit sooner or later terminates by sighing.

Dr. Cullen observes, that he never saw a case of catalepsy but what was counterfeited; and the same has been said by others. When it is not feigned, he considers it a species of apoplexy; there is however a very evident difference between a fit of catalepsy and apoplexy.

CAUSES.—The immediate cause is an impediment to the functions of the nerves subservient to voluntary motion. It may be brought on by passions of the mind, as fear, anxiety, anger; by intense thought, worms, and excesses of any kind.

TREATMENT.—If the patient be of a plethoric habit, or the face very red, and the blood vessels of the head and neck distended, eight or ten ounces of blood should be taken from the arm, or from the back part of the neck by

cupping. The aperient mixture*, No. 62, and antispasmodic clyster, No. 98, will also be necessary, and the mustard poultice, No. 111, applied to the feet.

Two or three table-spoonfuls of the following mixture should likewise be given every four or five hours:

Take of asafoetida gum, one drachm; Hoffman's anodyne liquor, two drachms; spirit of sal volatile, two drachms; camphorated julep, six ounces. Mix.

The smelling salts, or the camphorated acetic acid, may likewise be frequently placed to the nostrils.

If the disease should continue notwithstanding the employment of these remedies, the head should be shaved, and afterwards well rubbed with the following liniment:

Take of oil of amber, four drachms; spirit of hartshorn, half an ounce; oil of rosemary, two drachms.

Slight electric shocks have in some instances been of service, blisters do not appear to have been attended with any beneficial effect.

The following case of catalepsy is published in the Commentaries of the History of Diseases, by the late Dr. Heberden:

“ The 26th of June, 1764, a woman aged 36, was admitted into Saint Thomas's Hospital, motionless, with a fit of catalepsy. Her pulse was quite natural, her breathing easy; her eyes were fixed, as by an attentive contemplation, not like those of a person who is either dying, or sick, or under any pain or uneasiness. Her

* If the patient makes a noise with the teeth, the existence of worms in the stomach may be suspected; in which case the basilic powder, No. 36, should be administered in lieu of the mixture.

limbs all retained the situation in which they were placed by the bystanders, however inconvenient. I extended her arm, and saw it stretched out twenty minutes; and I was told it continued so on a former trial above an hour; which scarcely any body in health could support. I heard even, that it would remain extended with a weight of seven pounds in the hand. If the patient was placed upright, she continued so, and was not very easily thrown down. While she was sitting down, both the legs were extended and raised from the ground, and they remained in that uneasy posture, as if they had been made of clay or wax. Her mouth was closed, and I was unable by any means to open it. The eyelids were constantly open; and if forcibly closed, they opened again as soon as the force was removed. She winked, but in a very slight manner, on moving the finger through the eye; at other times the eyelids did not move. At the approach of a candle the pupil contracted. If the nostrils were compressed, after a little effort and apparent struggle, the lips opened for the purpose of breathing. I heard that she had been in this state some months. The fit returned morning and evening almost every day, and continued sometimes an hour, and at other times three hours. The nurse reported, that one fit had lasted twelve hours. She used to be seized without any previous notice."

OF CATARACT.

This disease consists in an opacity of the crystalline humour of the eye, preventing the rays of light passing to the optic nerve, and thus producing blindness. If the retina (the expansion of the optic nerve in the interior of the eye) be not diseased, vision may, in most cases, be

restored, by either depressing the diseased lens, or extracting it entirely, which is technically termed *couching*.

With respect to the advantages of one operation over the other, there is a great difference of opinion. Many very respectable surgeons give the decided preference to the depression of the lens. This operation is less painful and hazardous than extraction, and will ultimately answer, if the lens happen to be soft (which cannot always be predetermined); if it be not wholly depressed, it will probably be absorbed, after its cyst is ruptured, which may be promoted by the exhibition of a little mercury. The only objection to this operation is, that the lens will sometimes rise again into its former situation; but this certainly does not occur often. Some of the first oculists in London recommend the extraction of the lens; but it must be allowed that the intention is too often frustrated by the inflammation and consequent thickening of the tunics of the eye that so frequently follow the operation; and it not unfrequently happens, that after the patient has gone through the pain of the incision, the lens is too soft to be removed entirely. The depression of the lens, on account of its being more simple, less painful, attended with little or no risk, and of succeeding as often as extraction, is entitled to the preference. Mr. William Hey, senior surgeon to the Leeds Infirmary, after thirty-three years practice in diseases of the eye particularly, states that *experience* has led him to prefer the mode of *depression*, and very ably and satisfactorily confutes the arguments adduced by Baron Venzet and Mr. Ware in favour of extraction.

So many well-authenticated instances of the absorption of opake lens, by the *internal* use of mercury combined with hemlock, having lately been published, it would in

all cases be adviseable to give those medicines a *fair* trial before an operation is determined on.

The following is the usual form for their exhibition :

Take of extract of hemlock, one drachm; prepared calomel, fifteen grains.

To be well mixed, and divided into twenty pills. One to be taken three times a day.

Of all the preparations of mercury, I have found the muriate of mercury to answer in this respect best. Eight grains of this preparation may be dissolved in an ounce of spirit of wine, ten drops of which may be taken in a wine-glassful of barley water twice a day; after taking it a week, the dose may be increased to twenty, or even thirty drops, if the stomach will bear it. After three or four weeks trial of this medicine, the patient will be able to determine whether it be likely to prove of any utility.

Electric sparks may also be applied to the ball of the eye once or twice a day.

The following remarkable case of the gradual disappearance of a cataract, is an evident proof that the absorbent vessels of the part are equal to the removal of a diseased lens.

Admiral Henry having a cataract in both eyes, consulted Mr. Ware, who recommended extraction. The admiral agreed that he should first extract one, and in case that answered, he promised to submit to the operation on the other. Unfortunately, however, he was not in the least benefited by it; for so much inflammation and thickening of the cornea succeeded, as entirely to destroy vision. The admiral having cured himself of many obstinate attacks of rheumatism and gout by friction, and by beating the parts with a wooden hammer, resolved to make

the same experiment on the eye affected with cataract. After rubbing, and at times gently beating the ball with a small wooden hammer (the eye-lids being closed), in a few weeks he found that he could discern a luminous body, and by continuing the practice, the diseased lens was so totally absorbed, that the gallant admiral was enabled to read small print, after being a considerable time blind.

To many it may appear strange that the most experienced oculists in London, should recommend extraction in preference to depression. As these oculists cannot give any satisfactory reason for doing it, and as one operation is performed by them with as much facility as the other, many suspect that they are influenced in their decision by sordid views. The operation of extraction appearing to the patient most formidable and intricate, the operator is always better paid for it. It is to be hoped, however, that no member of the profession can be so depraved, as in such cases to be actuated by sinister motives. That many do make a merchandize of the miserable I am fearful is but too true.

OF CATARRH, CORYZA, AND INFLUENZA.

Catarrh consists in an increased secretion of mucus from the membrane lining the nostrils, fauces, and often the lungs, attended with slight fever, and cough. It generally begins with a sense of stoppage in the nose, a dull pain, and a sense of weight in the forehead, and stiffness in the motion of the eyes, and soon after a discharge of a thin fluid from the nose, and often the eyes, somewhat acrid, which constitute the complaint termed *coryza*, and, when the symptoms run high and the disease very prevalent, *influenza*.

CAUSE.—This disease is evidently the effect of cold, which, by checking the natural perspiration of the skin, produces an afflux of fluids either to the membranes of the nose, the fauces, or lungs.

TREATMENT.—When the febrile symptoms are moderate, it is only necessary to avoid an exposure of the body to cold, and to observe a low diet for a few days; but when the symptoms run high, it will be proper to keep in bed, and take *frequently* some warm diluting drink, as barley water, gruel, or *weak* white wine whey, with the view of promoting perspiration. The cough mixture, No. 66, should also be taken every three or four hours; and if the patient be afflicted with *pains* in the chest, and *great* difficulty of breathing, or be disposed to consumption, the loss of blood from the arm, and the application of a blister to the side most affected, or over the breast-bone, should not be delayed. The diet should be low, and the almond emulsion, or the compound barley-water, with a little liquorice root boiled in it, as directed in the Appendix, should be employed as the common beverage. See *Cough*.

People affected with catarrh generally regard it as a very trifling complaint; it is, however, often the forerunner of very serious affections, such as inflammation of the brain, lungs, &c. and in scrofulous constitutions, when neglected, is frequently the exciting cause of consumption. It should therefore in every instance be attended to.

CANINE MADNESS. See *Animal Poison*.

CHIN COUGH. See *Hooping Cough*.

OF THE CHICKEN, OR SWINE POX.

The eruption termed Chicken Pox sometimes appears without any illness or previous sign, but most commonly it is preceded by slight fever. The vesicles are *always distinct* and *less* in size than those of the *small pox*; on the second day there is on the top of most of them a very small bladder, about the size of a millet seed, containing a thin, colourless, and sometimes a yellowish fluid. This disease generally terminates in *three* or *four* days, from the first appearance of the eruption, and is attended with so little danger as to require no restraint of diet, or medical treatment, till *after* the *crusts* of the pustules begin to peel off, when it will be proper to administer a dose of the basiliac powder, No. 36, or jalap powder, No. 27, and repeat it every third or fourth morning for a fortnight.

How DISTINGUISHED.—This eruption may be distinguished from that of the small-pox by not being preceded by illness, or only by a very trifling degree of fever; by the *early* appearance of the vesicles on the top of the eruptions; by the serum in them never acquiring the *colour* or *consistency* of *pus*; by the pustules being *dry* and covered with *crusts* on the *fifth* day; and by the eruption being generally first visible on the *back*.

OF CHILBLAIN.

The inflammatory swelling denominated chilblain, chiefly affects the heels, feet, and toes, and sometimes the arms and hands, attended with great pain, and often a considerable degree of itching.

CAUSES.—Chilblains arise from a *weaker* action of the *small* vessels most *remote* from the heart, occasioned by

cold or dampness, and therefore occur most frequently in people of delicate constitutions.

When the hands and feet are benumbed by cold, the excitability of those parts will be so much accumulated, that if they be brought *suddenly* near the fire, chilblains will be produced; and this imprudent practice is the principal cause of chilblains in this country.

TREATMENT.—When the parts are frost-bitten by long exposure to the cold, they should be plunged into the *coldest* water, and afterwards rubbed with salt. When they are only benumbed, they may be rubbed with camphorated spirit of wine or opodeldoc, to either of which a little laudanum may be added, if the pain or itching be very troublesome; but when they crack and discharge an *acid* matter, poultices should be applied, but not for any length of time, as their *continuance* is apt to produce *fungous excrescences*. The application of diachylon plaster spread on leather, will afterwards effect a cure. An ointment composed of equal parts of nitrated quicksilver ointment and olive oil, is also a very excellent application for chilblains in every stage, and particularly when the skin is cracked or ulcerated. It should be well rubbed into the parts with the warm hand; but if the skin be cracked, it may be applied spread upon lint, and in case of much inflammation, a poultice will be also necessary.

People subject to chilblains should, on the approach of winter, wear flannel socks, and gloves lined with flannel; and if the heels suffer most by them, it will also be advisable to wear over them a camphorated mercurial plaster spread on fine leather.

CHOLERA MORBUS.

This disease consists in excessive secretion of the bile, which, from its preternatural acrid quality, excites vomiting, purging, and pains in the bowels, which are sometimes attended with spasms in different parts of the body. Great thirst, cold sweats, fainting, coldness of the extremities, irregular and small pulse, and troublesome hiccough, are also attendant symptoms. It is most prevalent during hot weather; and where the symptoms are violent, it often proves fatal in forty-eight hours.

CAUSES.—As the disease occurs most frequently in warm climates, and in cold climates during the hottest months of the summer, it is very probably the effect of a *warm* atmosphere, which, by stimulating the liver, produces an excessive secretion of bile*. It is sometimes occasioned by putrid vapours, and obstructed perspiration.

TREATMENT.—The first object in the treatment of this disease is to dilute the bile, by directing the patient to drink very plentifully of barley water, gruel, or warm water, in order to prevent its irritating the alimentary canal, and by injecting the same by way of clyster, till the pains begin to abate, when fifteen to thirty drops of liquid laudanum may be given in mint water, or tea. If the vomiting continues obstinate after the use of the laudanum, one drachm should be administered in half a pint of gruel or starch jelly, by way of clyster. If the bowels swell, the belly should be fomented with a decoction of camomile flowers, or the patient be put into a warm bath for

* Whenever any of the secretions of the body are excessive, they are always more acrid in their quality.

ten or fifteen minutes. A large blister should also be applied over the region of the stomach and liver.

Dr. Douglas, in the Medical Essays, recommends a decoction of oat bread, toasted as brown as coffee, to be taken freely. He says that he does not remember that this decoction was ever vomited by any of his patients. Mint tea is also said to be very efficacious in this disorder.

If laudanum be not retained in the stomach, it may be given with eight drops of the diluted vitriolic acid; and if this form be ejected, a pill of two grains of crude opium may be administered in their stead.

When the vomiting is not very troublesome, Dr. Fordyce recommends from twenty to thirty grains of rhubarb powder to be given, and the patient afterwards to drink copiously of chicken broth, or barley water.

After the vomiting and purging have ceased, the stomach and bowels will require the use of some mild tonic medicine. For this purpose the decoction of the Iceland moss, on account of the bitter being combined with mucilage, will answer best. To each dose six drops of the diluted vitriolic acid may be added, and as soon as the nausea and feverish state of the system are entirely gone off, two tea-spoonfuls of the aromatic tincture of rhatany, in the decoction of the Iceland moss, will prove an excellent restorative medicine.

The bowels should be kept open by small doses of Epsom salt, or rhubarb powder.

CÆLIAC PASSION. See *Diarrhœa*.

OF COLIC.

This disorder is known by a violent pain in the bowels, commonly about the navel. The pain resembles various

kinds of sensations, as of burning, twisting, boring, or a ligature drawn very tight round the intestines. The belly is generally costive. When there is a violent evacuation of bilious matter, both upwards and downwards, it constitutes the disease termed *Cholera Morbus*.

The great difficulty in discriminating colic from inflammation of the bowels, renders this disease improper for domestic practice; if, therefore, the symptoms be violent, or the patient be affected with *rigors* and *fever*, medical assistance should be procured without loss of time, as the intestines cannot sustain inflammation many hours without endangering the life of the patient.

CAUSES.—This disease is often produced by a *sudden* check given to perspiration; by austere, acrid, or indigestible aliment taken into the stomach; the application of poisons, as lead, &c. and sometimes worms and costiveness.

TREATMENT.—The first object is to evacuate the contents of the intestines, by the use of castor oil, No. 3, with the aperient mixture, No. 62, and the clyster, No. 97. The *spasmodic* affections of the bowels may be relieved by fomentation, or the warm bath, and the use of ten to twenty drops of laudanum, No. 31, the occasional exhibition of the anti-spasmodic mixture, No. 70, and the clyster, No. 98. In case of fever, with a full pulse, the loss of blood from the arm will sometimes be proper to *prevent* inflammation of the bowels. The dose of laudanum may be increased or repeated according to the *severity* of the pain, even during the time the remedies are employed to procure a stool. It will, however, in all cases, be most prudent to defer the use of this remedy till three or four evacuations be produced by the aperient medicine.

HOW DISTINGUISHED.—The young practitioner will be able to distinguish colic from inflammation of the intestines by the pain being *wringing* and not of a *burning* sensation ; by the spasmodic contraction of the *abdominal muscles* ; by the *absence* or *trifling* degree of fever ; by the state of the pulse, and by the *diminution* of pain upon pressure.

PREVENTION.—People subject to this disease should avoid much vegetable food and fermented liquors, guard against costiveness by a warm purgative medicine, as the compound colocynth pill, No. 84, and should wear flannel next the skin.

OF CONVULSIONS.

There are different species of convulsions, viz. epilepsy, hysteric fits, lock jaw, &c. which are noticed in their alphabetical order, except the convulsive fits of children, which are given among the Diseases of Infants, in the Appendix, page 134.

OF CORNS.

Corns consist in a lamellated hard thickening of the cuticle, generally of the feet, and are evidently occasioned by the pressure of tight shoes, &c.

TREATMENT.—The callous inorganic substance, after having been immersed in warm water about an hour, should be pared off with a sharp knife, and the part afterwards defended with the plaster, No. 109, or the diachylon plaster, No. 58. The occasional cause should afterwards be avoided, by wearing loose shoes. When they are situated at the bottom of the feet, their recurrence may be prevented (after their removal as above directed), by the use of the horse-hair socks (noticed page 188); the elasticity

of which will obviate the effect of pressure and pain in walking.

Plasters of verdigris and the red precipitate of mercury have been much recommended for the removal of corns, and for alleviating their pain. From their caustic property, they may have a good effect, but from this circumstance they may also irritate and aggravate the pain. The benefit of plasters is often more the effect of the soft leather on which they are spread, than any medicinal quality of the plaster itself; hence putting on three plasters, one above the other, the lowermost having holes in their centre to let through the top of the corn, by taking off the pressure of the shoe, may be highly useful.

Diachylon plaster, spread on leather, (about the size of half-a-crown), applied on the upper part of the foot, about an inch or half from the corn, is esteemed a sovereign remedy by Admiral Henry; who having received essential benefit from it, has, from motives of humanity, requested me to recommend it in this work.

OF COSTIVENESS.

Costiveness is generally attended with head-ach, giddiness, disagreeable taste in the mouth, a disrelish of food, and sometimes the piles.

CAUSES.—It is generally the effect of a sedentary life, a deficient secretion or inertness of the bile, the use of port wine, a redundancy of slime, acidity in the stomach or bowels, or a spasmodic constriction of the intestines.

TREATMENT.—The alterative doses of the aperient salts, No. 2, taken every morning in whey, will succeed in obviating costiveness much better than rhubarb, which, after its operation, is very apt to leave the bowels in a cos-

tive state. When an accumulation of slime is suspected in the intestines, which is frequently the case, three or four grains of calomel may be taken at bed-time, and repeated every third night; and the aperient salt, No. 2, the following morning; three or four doses will generally be sufficient for this purpose. For costiveness attendant on a suppression of the menses, the ecphratic pill of the Edinburgh Pharmacopœia will prove the best remedy, and will at the same time produce the monthly evacuation. See *Treatment of Green Sickness*. In case of much pain in the bowels, the operation of these medicines should be promoted by the use of the laxative clyster, No. 97.

When costiveness is attended with acidity in the stomach, the prepared natron dissolved in water, and taken as directed, No. 60, will prove an effectual remedy; and the use of the tincture of chamomile and ginger, as directed No. 7, a vegetable diet and moderate exercise, will prevent its recurrence. Costiveness produced by the use of lead, to which painters are particularly subject, requires much more active medicines, such as the compound colocynth pill, with calomel, in the proportions recommended for the cathartic pills, No. 84. A stimulating clyster of aloes and salt is also necessary. See *Colic*. When costiveness is accompanied with piles, the electuary for piles, No. 85, will answer best.

In scrofulous subjects, and young women from the age of fifteen to twenty, a costive state of the bowels should be guarded against; for it is a fact, that a consumption of the lungs, and green sickness are always preceded by obstinate costiveness; and so sensible are these patients of it, that they often attribute their complaints to neglect of it; and there can be no doubt, but that constitutional diseases

are often brought into action by it. People disposed to apoplexy are subject to costiveness, in consequence of slight compression of the brain from distension of blood vessels. This state of bowels favouring plethora, should be in them particularly guarded against.

OF COUGHS.

When a cough occurs in a scrofulous subject, or a person of consumptive habit, or born of consumptive parents, or at the consumptive period of life, it requires more attention than the patient is generally willing to allow. A blister to the breast bone, the loss of blood from the arm, the occasional use of the aperient mixture, No. 62, the cough mixture, No. 66, low diet, and the use of flannel next the skin, are all indispensably necessary to prevent organic disease of the lungs, that constitutes pulmonary consumption,—a very common termination of neglected coughs.

For those chronic or habitual coughs to which many people are more or less subject every winter, attended with shortness of breath, wheezing, and an expectoration of viscid phlegm, without pains in the chest or fever, the following mixture will prove very beneficial, in the dose of two table spoonfuls about every four hours.

Take of the emulsion of gum ammoniac, six ounces; tincture of squills, three drachms; spirit of hartshorn, two drachms; pæregoric elixir, six drachms; purified honey, half an ounce.—
Mix.

The squill lozenge is also a very excellent medicine. When the cough is attended with swellings of the legs, paucity of urine, and great difficulty of breathing on lying down, three or four grains of the oxy-phosphate of

steel, made into a pill with a little honey, should also be taken twice a day ; but as these are unfavourable indications, the advice of an experienced practitioner should be resorted to.

There is an habitual cough very prevalent, to which some people are more or less subject every winter, arising from increased irritability of the membrane lining the wind-pipe and its ramifications, and a loaded state of the substance of the lungs from the effusion of serum preventing their due expansion. This cough approaches to the nature of asthma, but the patient is free from the asthmatic paroxysm. The following medicine I have found very beneficial in this species of cough.

Take of æthereal tincture of steel, three drachms ; tincture of squills, five drachms. Mix.

From thirty to forty drops to be taken two or three times a day in a wine glassful of horehound tea.

A pill composed of three grains of extract of poppies, and two of ipecacuan powder, may also be taken every night. The state of the bowels should be attended to.

The young practitioner, before he ventures on this treatment, must ascertain whether the loaded state of the lungs be the consequence of effusion of serum in the parenchyma of the lungs, or of distension of blood vessels, as in the latter case, the æthereal tincture of steel and squills would be productive of serious mischief. If the patient be free from fever, of a pallid countenance, and the ancles be swollen in the evening, there can be no doubt, but that the oppression of the chest arises from effusion of serum.

For the cough of children from two months or upwards, a gentle emetic dose of ipecacuan powder, administered every twenty-four hours, generally affords very consider-

able relief, and will often speedily cure it. If attended with great difficulty of breathing, or pain on coughing, a blister, or Burgundy pitch plaster, should also be applied between the shoulders, or over the breast bone, and a tea-spoonful of a linctus of almond oil and syrup of white poppies, given three or four times a day. The almond emulsion is a very pleasant and excellent medicinal drink for children affected with cough—it not only allays thirst, abates fever, and relieves the cough, but is so nutritious that if a child takes more than half a pint, in the course of a day, it will require but little besides.

Cough is a symptom of pleurisy and inflammation of the lungs, when it is attended with rigors, fever, and acute pains in the chest. See *Pleurisy*, and *Inflammation of the Lungs*.

Cough is also a symptom of Dropsy of the Chest, when it is attended with general debility of the system, often swelling of the legs, especially towards night, great difficulty of breathing, and often a sense of suffocation when in an horizontal position. See *Dropsy of the Chest*.

Cough being symptomatic of such *opposite* affections of the lungs, the danger of the *general* remedies (so industriously advertised by designing quacks), must appear obvious to the most ignorant. These medicines being composed of paregoric elixir, tincture of tolu, gum benzoin, &c. sold under plausible fictitious names, as the essence or balsam of some herb held in estimation for its supposed healing powers, are a very serious imposition on the public: their stimulating properties having no doubt often produced inflammation of tubercles, and thus occasioned a fatal consumption. In simple catarrh they will produce pleurisy or inflammation of the lungs, which by terminating

in suppuration or mortification, destroys the life of the patient in a few hours: and even in *chronic* cough they are often hurtful by checking expectoration. The open manner in which this traffic is carried on in this country reflects disgrace on the medical police of the metropolis, and demands the interference of the legislature.

The lozenges sold under the name of *tolu*, *patarosa*, and *paregoric*, in consequence of their stimulating ingredients, are very improper in cases of recent coughs; they are likewise hurtful to the digestive organs, by generating acidity in the stomach, and have a very injurious effect on the enamel of the teeth, which in scrofulous or rickety habits they either destroy or render black.

Cough, it must therefore be remembered, is not only the effect of obstructed perspiration, but proceeds from various other causes, particularly in children, such as teething, bowel complaints, foul stomach, fever, &c. and is a recurring symptom in delicate habits. Although cough is generally considered a very trifling affection, every person acquainted with the delicate structure of the lungs, must allow that they require the greatest attention and judgment in their treatment. More people die in this country of cough than of any other disease, which in its commencement might have been readily cured by the most simple medicine. *Hæmoptoe*, and consumption of the lungs, are generally the consequences of neglected or ill treated coughs. Scarcely any disorder alarms the mind of a medical man, when affected by it himself, more than cough; and hence, by attending to it on its *first attack*, medical men very rarely die of diseased lungs.

OF COW-POX.

The earliest notice of the cow-pox, and its *supposed* powers in preventing the infection of the small-pox, has lately been found, by Mr. Steinbeck, to exist in a periodical work, published at Gottingen in the year 1769, by which it appears the people in that country who had received the cow-pox, flattered themselves they were by it secured against the infection of the small-pox. It is remarkable that this circumstance should have escaped the attention of the physicians of Germany. It is likewise asserted by Dr. Barry, of Cork, that the cow-pox has been known in Ireland from time immemorial, and in the neighbourhood of Cork it has been called *Shinach*, a term which belongs to the ancient language of the country, and seems to have been applied to this disease as far back as oral testimony can be carried. The disease is familiar in most counties in England; in Gloucestershire in particular, it has been long supposed that those who had received the cow-pox were secure against the small-pox. This prevailing opinion induced Dr. Jenner, then resident at Berkley, in that county, to make some experiments with the matter of the cow-pox, the result of which he published in 1798. The advantages of this disease over the small-pox are represented by this author to be,

1st. Its *uniform mildness*, that out of two thousand inoculated with the cow-pox, not one died; and therefore may be practised in all ages with safety.

2dly. That it is not communicable by effluvia, and therefore any part of the family may be infected, without affecting the rest.

3dly. It does not disfigure the skin.

4thly. Requiring no medical attendance, it may be practised by any intelligent person.

The matter for inoculation should be taken in an early state of the pustule, generally about the fourth or fifth day after the inoculation, by puncturing the skin of the pustule with a lancet, and collecting thereon the *clear limpid* matter that exudes, with which the arm of the person to be infected should be so slightly scratched as to draw blood. On the third or fourth day the part will appear a little red and prominent, which will keep increasing to about the ninth or tenth day, when the constitution will be infected, the signs of which are a slight fever, and a little enlargement of the glands in the pit of the inoculated arm. The part should be defended from the friction of the linen by applying a little gold-beaters skin; and if the surrounding inflammation should run high, the application of the lotion of Goulard's extract, No. 30, will be proper.

Care should be taken that the matter be collected from a *genuine* cow-pox pustule, and *before* it begins to scab, or the matter becomes opake and thick, and the system be affected; for if the matter does not enter the constitution, the patient will be liable to the small-pox.

From inattention to these particulars, it has been suspected that the reports of the small-pox succeeding the cow-pox inoculation have arisen; for unless the matter be *genuine*, and the *constitution be infected*, the person cannot be secured against the small-pox contagion. It may happen that the inflammation excited by the inoculation with genuine cow-pox matter may remain local, *i. e.* the inflammation may go on so as to form a pustule, without any portion of the matter entering the system, when, of

course, the subject must remain liable to small-pox infection. The same may occur from the small-pox matter, cases of which are by no means uncommon.

The principal benefit resulting from the introduction of this disease among the human race is, that by its *general* adoption the small-pox may be so entirely extirpated, as even to render, in the course of a few years, the inoculation with the cow-pox matter unnecessary; and if it be not attended with this advantage, I conceive the discovery has been much over-rated.

In the last edition of this work, I was studious to give such an account of cow-pox, that would not prejudice my readers either in its favour or against it. Many failures having occurred within my own knowledge, I certainly could not conscientiously recommend it. In the first edition of this work, in consequence of the dissimilarity of the diseases, I expressed a doubt of its permanent effects in securing the constitution against small-pox contagion. The contest between the friends and enemies of the new practice, has been carried on with such heat and illiberality, that the assertions of either party, in my opinion, merit not the least attention. In consequence of the late recommendation of the cow-pox by the legislature, I resolved to give it another trial, by putting it to the test of experience. For this purpose I selected about thirty children whom I had vaccinated within ten years, with matter procured at the Vaccine Institution. I inoculated them all with one of my own children that had not been vaccinated in February last, with small-pox matter; and the only one that took it, was the child that had not been vaccinated. With those who had been vaccinated the longest, the inflammation produced by the small-pox matter

proceeded the furthest; indeed with the two who had been vaccinated nearly ten years, the inflammation gradually advanced till the seventh day. The result of these experiments, and the sufferings of my own child by small-pox, induced me to recommend vaccination. In the month of May last, I was requested to see one of the children that had resisted the small-pox, laid up with a full crop of small-pox! This case, with other similar ones that have since occurred in the practice of professional men of respectability, who were decidedly friendly to vaccination, convinces me that its effects on the constitution, which render it unsusceptible of small-pox contagion, will sooner or later wear out, and leave the person liable to small-pox. The cases of small-pox succeeding cow-pox that I have seen, have all been very mild, and I have no hesitation in attributing their mildness to the influence of vaccination on the system.

It is also but justice to the friends of cow-pox to remark, that I do not believe any *new* disease of the skin has appeared since its introduction. The disease is, indeed, so mild in itself, that if it be found to abate the violence of small-pox, the discovery may still prove a blessing to the human race. As its real merits at any rate remain doubtful, I caution my readers how they credit the reports of those who have so violently opposed it, as well as those in its favour, published by the *interested* supporters of it.

OF CRAMP, OR SPASM.

When cramp attacks the stomach, it is generally the effect of flatulence, and often precedes or attends a fit of the gout. When it is the effect of indigestion, it may be relieved by a small tea-spoonful of the compound spirit of

ammonia, No. 13, in half a wine glassful of water, to which a tea-spoonful of ether may be added if the patient be of a gouty habit, or the spasm be obstinate. The stomachic mixture, No. 61, or the gout mixture, No. 69, may afterwards be employed with great advantage to prevent a recurrence, and should be persisted in as long as the patient is troubled with any symptom of indigestion. The Jamaica ginger powder generally succeeds in gouty cases, better than any other stimulant. See *Gout* and *Indigestion*. If the spasm be so violent as to resist the use of ether and compound spirit of ammonia, from twenty to thirty drops of liquid laudanum may be added.

People subject to cramp in the stomach, should wear flannel next the skin, and avoid taking fermented liquors and green vegetables, particularly for supper.

Cramp in the lower extremities is a very common attendant on the latter stage of pregnancy, in consequence of the pressure of the womb on the nerves leading to them, and particularly during labour, from the pressure of the head of the child. In either of these cases it may be relieved by compressing the part affected with the hand, and sometimes by change of position, and by rubbing the part with dry flannel, or a flesh-brush. In obstinate cases, the application of ether and laudanum over the part affected is recommended, and is certainly worth a trial. When it occurs during pregnancy, the internal use of laudanum and ether, as directed, No. 31 and 14, will be proper. In all cases the patient should avoid costiveness, by taking occasionally a little lenitive electuary, and should observe as much as possible an horizontal position. Cramp of the extremities may sometimes be speedily relieved by putting the *opposite* muscles into action; thus, when any of the

muscles of the calf of the leg are affected, by putting those on the front into action, which is done by drawing up the foot, the cramp will often instantaneously go off.

For the cure of cramp a variety of whimsical remedies are in great repute among the lower order of people, which being in themselves perfectly inefficacious, must depend on the imagination for success. Whatever affects the mind with surprise or horror, as the cracking of a roll of brimstone held in a warm hand, the wearing of rings formed of the nails or furniture of old coffins, and such like fanciful conceits, have certainly a wonderful effect on all spasmodic diseases.

OF CROUP.

This disease, which is principally incident to children, rarely occurs till after weaning. It is most prevalent in low marshy countries, on the sea coast, and in wet and cold seasons. It seems to be peculiar to some families, and after one attack the patient is very liable to a return on the slightest exposure to cold.

SYMPTOMS.—This disease generally commences with an obtuse pain about the upper part of the windpipe, which is increased on being pressed. The respiration is difficult, attended with wheezing and a *peculiar* ringing or stridulous cough, resembling the crowing of a *young* cock, and a trifling expectoration of mucous matter. The face is somewhat livid and often much flushed, and the swallowing little affected; there is also some degree of frequency and hardness of the pulse, great thirst, restlessness, and feverish heat. The urine on the first attack is generally high coloured, but sometimes limpid, and in the advanced stage, turbid. The wheezing and difficulty of breathing

are increased by a kind of preternatural membrane or layer of yellowish pulpy matter on the inside of the windpipe, becoming separated and stopping up the passage; from this circumstance it is in its progress subject to sudden and considerable aggravations, and not unfrequently produces suffocation. The hands and feet are sometimes swollen.

CAUSES.—It is occasioned by the application of cold combined with a moist atmosphere, particularly in the spring and winter seasons. The immediate cause of the sufferings of the patient consists in an inflammation of the inner coat of the windpipe, which is covered with a layer of yellowish pulpy matter, which Dr. Baillie in some instances found to extend from the upper part of the cavity of the larynx to the small branches of the windpipe, distributed through the substance of the lungs. There is likewise found on dissection, a collection of mucus in the windpipe and its branches, together with a mixture of matter.

TREATMENT.—Both from the situation and acute nature of this disease, *immediate* and *active* remedies are requisite to save the life of the patient; the chief of which are bleeding and blistering. On the *first* attack of the disease, six leeches should be applied over the windpipe, and a blister to the nape of the neck and also *over the windpipe*, as soon as the bleeding from the orifices made by the leeches will admit of it. If the pulse be strong, or the fever run high, the loss of blood from the arm will also be necessary. A dose of emetic tartar, No. 35, or the tartarised antimony wine, No. 16, should also be exhibited without delay; and if it should not operate on the bowels, a dose of the basilic powder, No. 36, or jalap and calomel, No. 27, should be given an hour after the opera-

tion of the emetic. The child may likewise be put often to breathe over the vapours of warm water and vinegar, provided it does not provoke coughing. If the skin should continue *dry* and *hot*, five drops of the antimonial wine may be given every three or four hours, with the saline mixture, No. 78; and in case these should fail of producing perspiration, the warm bath may be employed with advantage. The tincture of foxglove, in the dose of six or eight drops twice or thrice a day, has in some instances been found very beneficial. The discharge of the blisters should be kept up by dressing them with the weak mercurial ointment. This application, after the removal of the dead skin of the blister, has in so many instances produced such immediate relief, that I have been disposed to attribute the recovery of the children principally to it. The acetated ceruse, as directed for hooping cough, is also a very valuable medicine in this disease.

The child may be supported with fresh milk, mixed with almond emulsion or linseed tea, of which, in consequence of its thirst, it will take a sufficient quantity to support it. After the termination of the disease, the decoction of bark with liquorice will be necessary to prevent a relapse. Change of situation to a more light and dry air will also be advisable.

This disease sometimes attacks adults, when the same remedies to a greater extent are necessary.

DISTINCTION.—Croup may be distinguished from inflammation of the throat by the *peculiar shrill ringing sound* of the voice, and by the breathing being attended with a wheezing noise. The swallowing is also in general perfectly free, whereas, in inflammation of the throat, it is difficult.

Two species of croup has been noticed by some authors, the one depending on *inflammation* of the inner coat of the windpipe, termed inflammatory croup, which is described above; the other from *spasms*, unattended with inflammation, termed *spasmodic croup*--the latter species is of the nature of asthma, and comes on in the night-time. It often intermits, and in the intervals both the respiration and cough, if any exist, are free from the *characteristic* sound of the inflammatory croup. In the early stage of this disease, medicine has in general a very salutary effect; but if it be suffered to continue long, it will prove very difficult to relieve or cure. The most efficacious remedies in this species are emetics of ipecacuan powder, repeated every day, and the anti-spasmodic medicines recommended for asthma, which should be persevered in till the *croaking noise* has *entirely* left the patient. See *Asthma*.

OF CUTS.

The edges of an incised wound, termed a cut, if no foreign matter be left in it, should be brought into contact as soon as possible, and kept so by means of long strips of the diachylon plaster, spread on linen or leather, over which a dressing of brown cerate and a bandage should be applied. These dressings should not be removed for at least three days, when a repetition of them will, in a few days more, effect a cure. If much inflammation or pain should come on, the use of the lotion, No. 102, and the aperient mixture, No. 62, will be necessary. The traumatic balsam, commonly called Friar's Balsam, is a very common but improper application for fresh cuts: the hot resinous gums of which it is composed being separated on mixing with the blood, prevent the union of the sides of the wound,

and thus occasion ulceration. Such stimulants should therefore never be employed, however trifling the accident, as their irritating quality may be productive of considerable mischief, particularly in an inflammatory or irritable habit.

In very superficial cuts it is a common practice to apply the court plaster, which, by keeping the edges together, and defending them from the air, often succeeds: in all cases, however, the goldbeaters skin, or the diachylon plaster, spread on black silk or leather, will answer best.

When the wound is deep, or the parts much bruised, or attended with much loss of blood, it will be most prudent to apply to an experienced surgeon. See *Bruises*.

OF DEAFNESS.

Deafness is often produced by an accumulation or hardness of the secretion of the internal ear, termed wax; in which case the ears should be syringed every morning with warm soap and water till the obstruction be removed, and a little wool or cotton afterwards worn in them, moistened with two or three drops of camphorated oil of almonds. When deafness arises from *decay*, or a paralytic affection of the auditory nerve, electric sparks, and a blister behind the ear, and the use of the herb snuff recommended for head-ach, are the most powerful remedies. It will also be proper to improve the general health of the system, by the use of medicines calculated to promote digestion and give energy to the nervous system, as the following mixture:

Take of the infusion of rhatany root, six ounces; volatile tincture of valerian, half an ounce; compound spirit of lavender, three drachms.
Mix.

Of which three table-spoonfuls may be taken three times a day. Washing the head with *cold* water every morning will also prove very beneficial; for this purpose the head should be shaved.

When deafness is attended with ulceration of the internal part of the ear, which is known by a discharge of matter, the ulcer should be healed as soon as possible, by syringing the ear every morning and evening with the following lotion, made a little warm :

Take of the tincture of myrrh, one drachm; Egyptian honey, two drachms; pure water, eight ounces. Mix.

This diseased state of the ear, in which the tympanum is more or less injured, frequently follows the yellow fever, and is generally very difficult to cure, in consequence of a portion of the tympanum being destroyed, or the surrounding bone of the skull being carious. When deafness is occasioned by obstruction in the *Eustachian tube*, preventing the passage of air into the internal ear, the tube should be syringed with warm soap and water. When the cavity of this tube is obliterated by disease, which is not an unfrequent cause of deafness, Mr. Astley Cooper has ingeniously proposed to admit air into the internal cavity, by puncturing the *membrane* termed the *tympanum*, which he has practised very successfully. This operation is very simple, and attended with no pain.

A temporary deafness is often produced by slight cold, particularly in children, which frequently goes away in a day or two after the use of a little aperient and sudorific medicine, and avoiding the occasional cause.

Deafness is frequently the consequence of a deficiency of the secretion of wax; when a liniment that will at the same time soften the wax and gently stimulate the part, will

afford considerable relief, if not entirely remove the cause; such as the following:

Take of oil of turpentine, two drachms; oil of almonds, six drachms.
Mix.

Two or three drops to be dropped into the ear, or applied by means of a little lamb's wool.

It is scarcely necessary to observe, that the ear is a tender organ; and when affected with disease, requires very delicate management. Deafness arising from such opposite causes, it must appear to the most ignorant, that the stimulating medicines of quacks, so industriously advertised as a general remedy for deafness, must often be productive of serious consequences. I have known many instances of the use of a quack medicine having entirely destroyed the important sense of hearing.

OF DIABETES.

This disease consists in an increased discharge of urine, equal, and sometimes exceeding in weight the quantity of liquids and even aliment taken by the patient*.

SYMPTOMS.—The first symptom of this disease is, the increased discharge of urine, which soon acquires a sweetish taste, and, in fact, contains a quantity of sugary mat-

* In consequence of the urine having been found to exceed the quantity of food and liquids taken by the patient, some medical men have been led to suppose that the skin, instead of perspiring, absorbs humidity from the air. It is, I think, much more probable that the water is formed in the system by the union of inflammable and vital gas (the constituent parts of water), particularly as people afflicted with diabetes are also much troubled with inflammable gas. This generation of water, I believe, often takes place in the lungs, and is a frequent cause of asthmatic difficulty of breathing.

ter, sometimes in the proportion of one-eighth. This combination is considered its leading characteristic. The urine emits an odour resembling that of violets. The stomach sooner or later becomes affected, and a thirst and voraciousness of appetite succeed, which will often scarcely admit of being satisfied; with these symptoms there is generally a slight degree of fever present, and as the disease advances, the emaciation and debility of the body gradually increase, and is sooner or later attended with hectic fever.

CAUSES.—The causes of this disease are involved in great obscurity. Those people who indulge in fruit, sweats, meats, high seasoned dishes, wine, or fermented liquors*, are certainly most subject to it. Moisture, grief, vexation or agitation of the mind, sudden variations of temperature, are noticed by some authors as predisposing causes. Others attribute it to a morbid secretion of the gastric juice, the direct effects of which they suppose to be the formation of saccharine matter with a certain defect of assimilation, preventing the healthy combinations, and exciting the immediate separation of the imperfectly formed chyle by the kidneys. But as the stomach is seldom deranged till the diseased secretion of the urine has existed some time, it is more probable that the affection of the stomach is the effect and not the cause of the disorder; besides, if an increased action of the digestive organs were the cause, one would

* Dr. Trotter observes, that the majority of persons he has known afflicted with this disease were lovers of the bottle. "I suspect (says this author), that many drunkards have this complaint without taking notice of it, and that it comes and goes without creating alarm, just as they happen to live regular or otherwise."

expect, as the system became debilitated, the disease of urine would be diminished ; but so far from this being the case, the quantity of urine in general increases with the debility of the body. The disease depends in a considerable degree, as Dr. Baillie asserts, on a *deranged* action of the secreting vessels of the kidneys, by which the blood is disposed to new combinations, the effect of which is, the production of the sugary matter. The Doctor is farther of opinion, that the chyle may at the same time be so imperfectly formed as to render the blood more readily to be so changed. The kidneys, on dissection, are found preternaturally enlarged and flaccid.

TREATMENT.—In consequence of the urine being found to abound with *vegetable* matter, Dr. Rollo has proposed to cure this disease by confining the patient to a diet solely of animal food. This plan, it appears, did not succeed in the practice of the late Dr. Lubbock, of Norwich, who found, notwithstanding a strict adherence to animal food, that no alteration was produced either in the quantity or quality of the urine.

Dr. Gilby, physician to the General Hospital, near Birmingham, has published several cases of diabetes which were cured by the nitric acid, in the following proportion :

Take of nitric acid, a drachm and a half ; barley water, half a pint ; simple syrup, two ounces. Mix.

Four large table spoonfuls to be taken, with the same quantity of water, three times a day. Mr. Chavasse, surgeon, in Walsal, has found this medicine to answer in one bad state of the disease.

Dr. Dobson, of Liverpool, who has paid particular attention to this complaint, recommends the use of strength-

ening medicines, as the Peruvian bark; and Dr. Schutz, much extols lime-water as a remedy.

The hepatised ammonia, with an abstinence from vegetable food, has also in many instances been successfully exhibited in this disease. The small dose of five drops of this medicine should be begun with, and repeated three or four times a day, in a little water, and increased two drops in each dose every day till it produces some degree of nausea, or slight giddiness. This medicine should always be dropt at the time of taking, as by being mixed up in draughts, or any other form, it soon undergoes a decomposition that destroys its peculiar medicinal properties. A draught composed of fifteen drops of laudanum, twenty-five drops of antimonial wine, and a little mint water, is also recommended to be taken every night during its use; and costiveness prevented by the occasional use of flowers of sulphur, No. 55, castor oil, No. 3, or the compound colocynth pill, No. 46. This mode of treatment is directed to be pursued till the morbid condition of the stomach is removed, the marks of which are, a *diminished* secretion and *high coloured turbid* state of the urine, accompanied with a *loss* of appetite and *loathing* of food. At this time the tongue and gums lose their florid red colour and become pale: when these effects are produced, exercise is to be taken, and a *gradual* return to the use of bread, and vegetables, such as brocoli, spinage, peas, cauliflowers, cabbage, lettuce, and parsnips, in moderate quantities, is to be allowed. The drink should consist of such liquors as afford the least saccharine matter, as water with a very small proportion of brandy.

Dr. Ferrer has succeeded in three cases by giving the

Peruvian bark with the leaves of the bear's whortleberry and opium, in the following proportion :

Take of yellow bark, in powder, bear's whortleberry, in powder, of each one scruple ; opium, dried and powdered, half a grain. *Mix.*
To be taken four times a day, in a glass of lime water.

Lime water is likewise recommended by this author, for the common beverage.

Dr. Willan remarks, that although the disease may be relieved, and the saccharine quality of the urine removed, by the above treatment, he never yet met with a confirmed case wherein the constitution was not considerably disordered, or some organ essential to life, defective.

The rhatany root I have found to succeed in this disease much better than the Peruvian bark, and I believe is the most powerful tonic medicine we are yet acquainted with. An account of this root, and directions for administering it in this and other disorders, are given in the Appendix.

During its use the warm bath once or twice a week, and a flannel waistcoat next the skin, will be proper. The diet should principally consist of animal food, and the common beverage, of three parts of distilled water and one of alum whey*.

Since the last edition of this work was published, the loss of blood from the arm, to the extent of twelve ounces, about two or three times a week, according to its effects on the patient, has been much recommended as a certain remedy for diabetes; and several cases in which it fully succeeded, have been published. Many object to this treatment in consequence of the emaciated state of the

* This whey is made by boiling a drachm of alum in a pint of milk.

system; but as plenitude of the blood vessels is often attendant on emaciation, the practice cannot be objected to on that account; besides, we are so little acquainted with the effects of the loss of blood on the system under disease, that we should not condemn a remedy so well recommended, without giving it a fair trial.

An increased secretion of urine is a frequent attendant on the hysteric affection and gout, in which cases it is free from saccharine matter, and being a symptomatic affection, will of course cease with the primary disease.

OF DIARRHŒA, OR LOOSENESS.

This disease consists in frequent and copious evacuations of liquid stools, in consequence of preternatural irritation of the intestines, occasioned either by acidity, putrescency of aliment, the undue use of purgative medicines, obstructed perspiration, or, as is supposed by some, a translation of morbid matter to the bowels. When the stools appear *white* like cream, the disease is called *cæliac passion*; and when the food comes away in an undigested state, it is termed *lientery*.

TREATMENT.—When the strength of the constitution is not materially reduced by the evacuations, it may be considered as salutary, in which case, by avoiding much vegetable food and acids, and taking broth thickened with arrow root or rice, it will gradually cease.

If its debilitating effects should indicate the necessity of checking the evacuation, it will be most prudent to administer a gentle emetic of ipecacuan powder, No. 23, and afterwards fifteen grains of rhubarb powder, No. 26, in a little simple cinnamon water, with the view of removing any irritating matter from the stomach and intestines, prior

to the use of astringent medicines. The cure may be then completed by the cretaceous mixture, No. 64, and the occasional employment of the clyster, No. 96. If the skin be dry and hot, three grains of ipecacuan powder, No. 23, with five drops of laudanum, No. 31, should be taken at bedtime, in a little simple peppermint water. After the complaint is effectually checked, the decoction of the Iceland liverwort should be taken, as directed, page 81, or two tea-spoonfuls of the tincture of rhatany root or of Angustura bark, three times a day, in a little water, for the purpose of strengthening the stomach and intestines.

The animal and vegetable jellies, recommended under the head of *Arrow Root*, (see page 96) affords the best diet. Mulled wine, so frequently given in these affections of the bowels, by becoming sour, often aggravates the purging and produces pains. People subject to this complaint should wear flannel next the skin.

Such as indulge in the too free use of the bottle are very liable to purgings, probably from organic disease, or increased irritability of the intestines, and their consequent vitiated secretion; in such case, after the operation of an emetic of ipecacuan powder, and a gentle dose of rhubarb powder, the following medicines may be given with great advantage:

Take of alkalized mercury, half a drachm; opiate confection, one drachm.

Mix, and divide into eighteen pills, of which three may be taken every night, and two dessert spoonfuls of the aromatic tincture of rhatany or columbo root three times a day, in a wine-glassful of the decoction of the Iceland moss, (see page 81,) to which ten grains of the compound

cretaceous powder may be added if acidity prevail in the stomach.

The salutary effects of this treatment will be of short duration unless the patient observes a regular mode of living.

People predisposed to pulmonary consumption are very subject to diarrhœa, and in them it generally proves very obstinate; and if imprudently checked by astringent medicines, it is generally succeeded by cough, and other symptoms of incipient consumption. In such patients, therefore, instead of checking it, we should moderate it by the mixture recommended under the head of Lime Water (See *Lime Water*); and as it abates, we should also attend to the state of the lungs.

We should likewise carefully attend to the *effects* of diarrhœa on the system when it occurs in every species of fever. In those affections, it is most frequently an effort of nature to relieve the system; and in such case, if checked by officious art, it is generally succeeded by some local mischief, as inflammation of the brain, lungs, or bowels. Under the head of Cretaceous Powder, I have made some observations on the critical purgings of fever.

People with such tender bowels, as to be subject to diarrhœa on change of weather, or on any slight deviation from an accustomed mode of living, should wear flannel next the skin.

DISTINCTION.—This disease is distinguished from dysentery by the *absence* of fever on its *first* attack, by the discharge of *real fæces*, which in dysentery is rare, and only in a hardened form, and also the want of that fœtor in the discharge which attends dysentery, and marks it a contagious malady; an aggravated diarrhœa will hence often

very much resemble dysentery, and also be attended with slime and blood.

For the Purging of Children, see Appendix, page 132.

OF DROPSY.

This disease consists in an effusion of the serous portion of the blood, in different parts of the body, in consequence of local or general weakness, brought on by excessive drinking, poor diet, loss of blood, or by some mechanical cause. When the powers of the system are weakened, the blood rendered thin, and the exhalants being relaxed, the serous or watery part more readily escapes; and the action of the absorbent vessels being at the same time diminished, a preternatural collection of water rapidly ensues. It may likewise be produced by whatever increases the effusion from the exhalant vessels, or diminishes the action of the absorbents. Local dropsy is frequently occasioned by some enlargements or indurations of the body, mechanically interrupting the free return of blood to the heart; thus an impregnated womb, by compressing the large veins that convey the blood from the lower extremities, is a frequent cause of dropsical swellings of the legs. Induration or enlargement of the liver* will, in the same manner, produce dropsy of the belly; and a polypus in the right ventricle, or ossification of the valves of the heart, a dropsy of the chest.

* This diseased state of the liver is generally the effect of the abuse of spirituous and vinous liquors. Dropsy thus produced is commonly the harbinger of death.

Dropsy is distinguished according to its situation. When it occupies the cellular membrane, immediately beneath the skin, it is termed *Anasarca*; when the cavity of the belly, *Ascites*; and the chest, *Hydrothorax*; but the whole of such collections fall under the general denomination of Dropsy, and when produced by debility require the same method of treatment. The symptoms of *anasarca* are, an uniform pale, and often shining distension of the skin, generally of the legs, at first soft, and readily receiving the pressure of the finger. The swelling, by an horizontal position, is much diminished, and the face becomes puffed. It gradually extends itself upwards, till it occupies the thigh and trunk of the body, and sometimes even the head, attended with scarcity of urine, which is always high coloured. When it occupies the belly, the enlargement begins at the bottom, and gradually increases upwards, attended with a sense of weight and an evident sense of fluctuation on a sudden motion of the body. As the enlargement increases, the breathing becomes difficult, and the legs affected with *anasarca*. When the effusion is in the cavity of the chest, there is always, more or less, a sense of anxiety about the heart, a difficulty of breathing, which is increased by lying down, a dry cough, palpitation of the heart, paleness of the face, and when far advanced, the legs swell and a fluctuation is perceived by the patient on any sudden shake of the body.

TREATMENT.—The removal of the collected water, and restoration of the tone of the system, are the only objects to accomplish in the cure of this disease, when the cause is merely weakness. The first should always be attempted by internal medicines, in preference to surgical operations or blisters. For this purpose the bowels should be emptied

by a full dose of the basilic powder, No. 36, and the following day the diuretic pills, No. 80, page 71, with a wine-glassful of the tonic mixture, No. 77, page 70, should be taken as there directed. The basilic powder should be repeated occasionally. When the water is seated in the chest or belly, the following may be substituted for the basilic powder:

Take of powder of foxglove, one or two grains; prepared calomel, two grains; aromatic species, five grains.

To be taken two or three times a week, in a little of the Batavian spirit of juniper. A table-spoonful of steel wine may likewise be taken, two or three times a day.

The emetic powder, No. 88, may also be given two or three times a week, if the strength of the patient will admit of it. An emetic not only increases the action of the absorbent vessels, but is a powerful remedy in the removal of visceral obstructions. A speedy absorption of the water of dropsical swellings is often produced by spontaneous vomiting.

When the legs are affected, they should be well rubbed with a flesh brush, or camphorated oil; electric sparks, by stimulating the absorbent vessels, have also proved beneficial. If the legs only are affected, flannel rollers, regularly applied from the toes to the knees, will prove very beneficial; but when the thighs and belly are enlarged, they will afford no advantage. The diet should be chiefly animal food, and the common drink the Batavian spirit of juniper, or brandy (diluted), and port wine.

If the collection of watery fluid be not evidently diminished after due perseverance in these means; if situated in the cavity of the belly, it should be drawn off by an expert

surgeon; and if in the extremities, blisters or scarifications*, at the same time continuing the use of the tonic mixture.

From the supposition that the condition of the skin of a dropsical patient is changed from a perspiring to an imbibing state, it has been proposed to besmear the surface of the body with oil. The great accumulation of water during the intervals of tapping, which has in many instances been found considerably to exceed in weight the quantity both of food and liquids taken in the time, may be the effect of the union of the inflammable and vital airs, the former of which dropsical patients are much troubled with, and which evidently enters the blood-vessels, by its passing off in considerable quantity from the lungs. See *Flatulence*.

It must be remembered, that the causes of dropsy are more numerous than those of any other complaint, and it is more frequently the consequence of some other disease than a *primary* affection. It is likewise often influenced by such a variety of untoward circumstances, that it is impossible to lay down general rules for its treatment.—When it is attended with a diseased liver, mercury should accompany the use of tonic medicines, as directed under the head of Calomel—when the cause is doubtful, and when the patient is advanced in life, the objects we should have in view, are the improvement of the general health, as directed in cases of indigestion—to promote the secretion of urine, as suggested under the head of Squill Pill, and to support the parts by friction and the gentle pressure of a roller, that are most affected.

* These means should not be employed without the sanction of an experienced practitioner.

The diet should consist chiefly of animal food, either roasted or stewed down into soup or rich broth, and the beverage good port wine, or the Holland spirit of juniper (commonly called gin), which, mixed with the imperial drink noticed under the head of Cream of Tartar, page 62, will also promote the operation of the medicines by increasing the secretion of urine. The common practice of confining dropsical patients to a limited use of liquids, has never, I believe, been attended with any advantage. Dr. Cullen observes, that he has seen it carried to great length without any manifest benefit to the patient, while on the contrary (observes this esteemed author), the practice of giving drink very largely, has been found not only safe, but very often effectual in curing the disease. The ingenious and learned Dr. Millman recommends large quantities of watery liquids for the cure of dropsy. Not only from the instances he mentions from his own practice, and from that of several eminent physicians in other parts of Europe, but also in many instances in the records of physic, of the good effects of drinking large quantities of mineral waters in the cure of dropsy, I can have no doubt of the practice being very often extremely beneficial, by promoting the operation of diuretic medicines.

Exercise is often highly useful in dropsy; any mode may be employed that the patient can most conveniently take, such as walking, riding either on a horse or in a carriage, or swinging. It should always be as much as he can easily bear. By exercise alone, I am persuaded, employed early in the disease, Anasarca, or dropsy of the lower extremities may often be cured.

Dropsical swellings of the legs, attendant on pregnancy, may be relieved by flannel rollers, friction, and support-

ing the legs on a sofa or stool; and by keeping the bowels regularly open, by gentle doses of rhubarb, or linitive electuary.

DISTINCTION.—Dropsy of the belly may be distinguished from pregnancy, by being a regular enlargement of the belly, whereas that of pregnancy is generally evident on one side. The motion of the child is, after the fifth month, perceptible, on placing the hand on the bowels. In pregnancy the breasts are also enlarged, and often painful. Dropsical females seldom experience an interruption in the menstrual evacuation, unless the powers of the system be much reduced. Dropsy of an ovary is not so easily distinguished from pregnancy. By its progress, the state of menstruation, and general health of the patient, a medical man may be enabled to distinguish it from pregnancy.

OF DYSENTERY.

This disease generally occurs in summer, and autumn, about the time autumnal intermittent and remittent fevers appear, with which it is often complicated. When attended with a discharge of blood, it is vulgarly termed the *bloody flux*. It is probably a kind of specific inflammation of the internal membrane investing the intestines, particularly the colon and rectum, occasioning a considerable morbid secretion of mucus.

SYMPTOMS.—This disease consists in frequent evacuations of slime or mucus from the intestines, often mixed with blood, and when attended with the natural fæces, they are generally in a compact and hardened form. The motions are generally small, accompanied with very severe griping, and followed by a bearing down and considerable irritation of the anus. With these symptoms there are a

loss of appetite, sickness, and sometimes vomiting, and the patient sooner or later becomes affected with a fever, which is sometimes inflammatory, and very often of a putrid kind. This disease is more frequent in warm than in cold climates; and from its infectious nature, is often epidemic in camps and other places.

CAUSES.—Putrid air and aliment; fruit, and the too frequent use of fermented liquors; the action of strong cathartic medicines, and whatever increases the natural irritability of the intestines, are the causes of this disease.

From the dissection of patients who have died of this disease, the coat of the colon and rectum have been found affected with inflammation and its consequences, viz. ulceration, gangrene, contractions, and thickening.

TREATMENT.—In the cure of dysentery, the first objects are to empty the stomach by an emetic of twenty grains of ipecacuan powder, and the intestines by the Epsom salt, in the dose of half an ounce, dissolved in a little peppermint water. After these medicines have duly performed their office, in order to allay the increased irritability of the intestines, and to produce a determination of perspirable matter to the skin, two grains of ipecacuan powder, with ten drops of laudanum, may be given every three hours. A lavement made of starch administered twice or thrice a day, will also prove serviceable, by sheathing the inner surface of the large intestine, and also as a fomentation. When the pulse is full, hard, and strong; or when active inflammation of the intestines is suspected; the loss of blood from the arm may be necessary; but otherwise it will prove detrimental. At a certain period of this disease, which can only be determined by a skilful practitioner, blood-letting is often a very important remedy; but after

the inflammatory symptoms have subsided, the loss of blood will not only retard the recovery of the patient, but endanger his life. If the pain in the bowels be violent, a warm bath and a large blister to the abdomen will be necessary. The diet should be chiefly vegetable jellies, as that of arrow root, sago, tapioca, &c. &c.

When the first or violent symptoms are abated, and the disease advanced to a *chronic* stage, the following powder, taken three times a day in a tea-cupful of the decoction of the Iceland liverwort, will generally complete the cure.

Take of ipecacuan powder, one grain; rhubarb powder, four grains; cinnamon ditto, four grains. Mix.

If, after one or two days trial of this medicine, the symptoms should not considerably abate, eight grains of the compound cretaceous powder, and five drops of laudanum, may be added to each dose.

Several astringent and strengthening medicines are recommended at this period of the disease by medical authors, such as the *Simarouba bark*, *Columbo root*, *Cascarilla* and *Peruvian bark*; but I have found none of them to answer so well as the Iceland liverwort, which has never disappointed my expectations in one instance. Dr. Cheston, of Gloucester, has noticed a very obstinate case of dysentery, which resisted all other remedies, that was effectually cured by a decoction of this herb.

If the disease should continue obstinate, some visceral obstruction or ulceration of some part of the intestines may be suspected; in either case, five grains of alkalized mercury, with five drops of laudanum, in a tea-cupful of the Iceland liverwort decoction, twice a day, will prove very beneficial. The patient should avoid the use of acids and vinous or spirituous liquors.

Opium should not be employed in this disease unless a free evacuation of the bowels has been procured by aperient and emetic medicines, as it generally increases the inflammatory state of the system :—if, however, the patient suffers by acute pain in the bowels, it cannot be entirely dispensed with.—Five or six drops of Laudanum may in that case be administered with the Epsom salt.

After the complaint of the bowels has ceased, the rhatany root will prove very beneficial in promoting digestion and restoring tone to the intestines. It may be given in the following manner :

Take of extract of rhatany root, one drachm ; aromatic tincture of ditto, six drachms ; pure water, seven ounces.

Two or three table-spoonfuls to be taken every four hours.

The treatment of this disease must in a great measure depend on the *nature* of the fever accompanying it, and in all cases must be varied according to the predominating symptoms, &c. As the fever in general is of an ambiguous nature, it will be adviseable to call in regular assistance in the first instance.

This disease is sometimes highly infectious, and is no doubt often propagated by the effluvia arising from the stools of the patient. The fæces should therefore not be suffered to remain in the house, but conveyed to some distance from it immediately after their evacuation, and the vessel afterwards washed with vinegar. The room should likewise be often fumigated with nitrous vapour, which will not only prevent the disease from spreading, but contribute considerably towards the recovery of the patient.

If the disease be complicated with intermittent fever, the rhatany root or Peruvian bark should be employed in the earlier stages of the disease : great care should be taken

not to confound the rigors generally attendant on dysentery with intermittent fever; which would lead to maltreatment of the disease. In all cases flannel should be worn next the skin.

DISTINCTION.—This disease may be distinguished from diarrhœa, not only by being attended with a greater degree of fever and pain in the bowels, but particularly by the stools consisting chiefly of a *slimy mucus*, in which the *natural fæces* are seldom observable, and when so, they are in hard pieces or lumps.

OF EPILEPSY.

From the patient suddenly falling to the ground on an attack of this disease, it is also called *Falling Sickness*; and from its affecting the mind (being the most noble part of the rational creature,) it was termed by the antients, *The Sacred Disease*.

SYMPTOMS.—This disease consists in an involuntary and violent convulsive contraction of the greater part of the muscles of voluntary motion, particularly of the extremities, the eyes, the tongue, the lower jaw*, and the bladder, attended with foaming at the mouth and a total loss of sensation, and ending in a state of insensibility and apparent sleep. The patient on becoming sensible, complains of torpor, heaviness of the head, and general lassitude.

* A person unacquainted with the nature of these fits, would naturally suppose, on seeing a person so convulsed, that he must be in great agony. The patient at the time is, however, in a perfectly insensible state, and his sensations on recovery are often more pleasurable than otherwise. Sometimes, however, they are the reverse, and the horror of mind some experience has been*indescribable.

The fit often attacks suddenly, but for the most part is preceded by a pain in the head, lassitude, dimness of the eyes, and a kind of tremulous sensation, beginning in the lower extremities, often in the great toe, and ascending to the head. The fits frequently recur during sleep*.

CAUSES.—The dissection of epileptic persons has shown a variety of morbid appearances, as indurations in the brain or membranes, caries or preternatural projections of the internal surface of the skull bone; collections of serum, or purulent matter, and earthly concretions within the skull—while others, who have died of epilepsy, have exhibited no morbid appearance whatever. Aneurismal affections of the arteries of the brain, I believe to be often the cause of this disease, by the pressure and irritation produced by their distension, which often ends in fatal apoplexy or palsy, from the rupture of the aneurismal sack, a termination by no means unfrequent. It is likewise produced by the irritation of worms in the stomach or intestines, particularly the tape worm; also by dentition, and by violent passions of the mind, both of the exhilarating or depressing kind, as anger, joy, terror, and grief†.

In children, epileptic fits often precede the eruption of small-pox, measles, and other contagions, and sometimes occur in females that are subject to a retention of the men-

* I was requested to see an epileptic patient a few years ago, who was always attacked with the disease on going to bed, and continued more or less convulsed all night. He, however, rose every morning at the usual hour, without the least knowledge of what had happened, and apparently refreshed by his night's rest; nor would he have known that he was subject to fits, had not his bed-fellow acquainted him with the circumstance.

† Van Swieten's Commentaries, vol. iii. p. 414.

strual evacuation ; but they more frequently proceed from an hereditary disposition. See *Convul. of Children*, p. 134.

TREATMENT.—Various remedies for this disease have been recommended, from the time of Galen to the present period, but none have borne the test of experience. The *nitrate of silver** has lately been recommended as a specific for epilepsy by Dr. Cappe, Dr. Sims, and Dr. Bostock ; which, unfortunately, has not been confirmed by the experience of others, Dr. Magennis, and Dr. Kinglake, having published several cases in which it proved of no advantage. When the disease arises from worms, the basilic powder, No. 36, or the electuary, No. 86, with the use of lime water, and the tonic mixture, No. 77, will prove beneficial. See *Worms*.

When the cause cannot be ascertained, if the patient be of an apoplectic make, and of a plethoric habit of body, bleeding will be proper, but not otherwise ; as the loss of blood, by inducing debility, will render the recurrence of the fits more frequent. Valerian tea, with the tincture of the Russian castor, may be tried, with the following pills :

Take of nitrate of silver, one scruple ; extract of white poppies two scruples.

Mix well together, and divide into twenty-four pills, of which one is to be taken twice a day.

* When the nitrate of silver was first recommended as a specific for Epilepsy, Dr. Cheston gave it a trial at the Gloucester Infirmary. The first case that occurred, was a young man that had been subject to attacks twice a day for many years. After the exhibition of two or three doses, the fits suddenly left him, and he was shortly after discharged cured. He soon experienced a relapse, for which he was re-admitted, and the same medicine administered without producing any beneficial effect whatever.

If these pills afford no relief, after twelve days perseverance in their use, (for I do not conceive it safe to continue them longer, unless the patient derives very considerable advantage from them without producing any derangement of the digestive organs or bowels,) the following are worth a trial :

Take of vitriolated zinc, half a drachm ; essential salt of bark, one drachm.

Mix, and divide into twenty pills ; two to be taken twice a day, with a draught of valerian tea.

The following bolus much recommended by Dr. Hugh Smith, is a favourite remedy with many routine physicians.

Take of Russian castor, one scruple ; oil of hartshorn, six drops ; the confection called Paulina, ten grains.

Mix for a bolus ; to be taken every six hours.

The flowers of cardomine, or lady's smock, have been prescribed with advantage by Sir George Baker ; the fresh powder may be taken, to the extent of a drachm, three or four times a day.

Mr. Hodgson, of Bishopwearmouth, has published a case of a young girl, about eight years of age, that was cured by electricity. A young lady was cured by citizen Portal, that was every day attacked by an epileptic fit. The attack beginning in one of her toes, suggested to that able anatomist the idea of dividing the nerve, for the purpose of interrupting the communication with the brain ; but he began by the application of opium to it, and that alone effectually prevented a recurrence.

The good effects of calcined zinc, have been attested by Dr. Haygarth, of Chester ; Dr. White of York ; and Mr. Bell, of Edinburgh.

The following prescription for the exhibition of this medicine, is given by Dr. Saunders :

Take of calcined zinc, eight grains ; conserve of roses, sufficient to form a bolus.—To be taken twice a day.

Dr. Henry Fraser lately published a treatise on the efficacy of the misletoe of the oak in the cure of epilepsy ; by which it appears that Mr. Heynes, an ingenious surgeon at Moreton, in Gloucestershire, has administered this remedy in three different cases of epilepsy with complete success ; all of which, it is stated, previously baffled the skill of several eminent practitioners ; and Dr. Fraser asserts, that its exhibition has uniformly been attended with success under his directions. A case of this disease in a lady of quality, in which it proved remarkably successful, is related by Boyle ; and, some years afterward, its use was strongly recommended by Sir John Colbach, who has published several instances of its good effects. In a few cases in which I have known it exhibited, it totally failed to produce any salutary effect whatever, while in others it has entirely suspended the disease.

As there is incontrovertible evidence that these medicines have succeeded in certain cases, and as the disease arises from such a variety of causes, they are all deserving of trial ; for, in the treatment of so distressing a complaint, no plausible remedy should be left untried.

If the patient be affected with pains in the head, a seton in the nape of the neck should not be neglected, and the feet kept warm by the use of flannel socks.

The diet must depend on the state of the constitution of the patient ; if it be debilitated, it should be nutritious, but not stimulating. Distilled water affords the best beverage : this article, though simple in itself, may, by

quieting the system and promoting digestion, prove of more real and permanent advantage than the most potent medicines. Hippocrates judiciously directs a total change in the manners of life, that former habits may lose their influence.

The seat of this disease is evidently the brain and nervous system, and therefore, whatever tends to render the body irritable, will produce the fits: now as a great sympathy exists between the brain and stomach, we find epileptic patients more affected with fits when the stomach is disordered; hence, in all cases of epilepsy, we should pay particular attention to the state of the digestive organs, and the epileptic patient should avoid every thing that has a tendency to disagree with the stomach. When the stomach of an epileptic patient is relaxed or weak, stimulants and astringents, such as lunar caustic, flowers of zinc, &c. will often succeed in preventing a recurrence of the fits; and hence many routine physicians conclude, that the remedies are antispasmodic.

The power of the association of ideas, is in this disorder very remarkable: a gentleman, now resident in the city of London, is always seized with an epileptic fit on entering his carriage; and Van Swieten relates a case of a child, who after being frightened into an epileptic fit by a great dog leaping on him, experienced a return for some time on seeing a large dog, or even by hearing his barking at a distance. It is a well-known fact, that the mentioning or recalling to the mind any particular circumstance that attended an epileptic fit, will often re-produce it. Hence, the learned Galen very judiciously advises all things to be avoided that lead to the recalling the disorder to the memory. Others of the ancient physicians, observing how

much this complaint is connected with mental affections, and how it may be reproduced by reflecting upon it, have endeavoured to abstract the mind from such ideas, by exciting impressions still more powerful. Upon this principle it was, I apprehend, advised by Pliny*, for the patient to drink the warm blood of a gladiator, that issued from him in the agonies of death. Scribonius Largus directs a portion of his liver† to be eaten for the same purpose; and Aretæus not only mentions these, but several others of the disgusting kind, as the raw heart of a coot, the brain of a vulture, &c. If these strange hideous remedies could have any efficacy, it must be owing to their absorbing the attention, and of course leaving no room for the apprehension and recollection of the disorder to operate; and in this way it is possible they may have been of service. The relics of saints, and such like trumpery, have on the same principle obtained celebrity in the prevention of this disease: the religious ideas connected with them, no doubt, in those superstitious times, operated powerfully on the imagination.

As the nervous system is more affected through the medium of the mind than by the effects of medicine on the body, certainly whatever produces a serene state of mind, tranquillizes the nervous system. Whatever rouses the power of the mind, strengthens the nervous system—and *vice versa*.

DISTINCTION.—This disease may be distinguished from apoplexy, by the *increased action* of the muscles, and from hysteric fits, by *not* being attended with the spasmodic contraction of the muscles of the *gullet*, giving

* Pliny's Hist. Nat. lib. 28, cap. i.

† Scribon. Larg. cap. ii.

the patient a sensation of a ball rising in it, and by the patient having *no* dread of death.

OF ERUPTIONS OF THE SKIN.

Under this head I shall include the treatment of the chronic eruptions of the skin, generally, but improperly, termed *Scorbutic*.

When pimples, or pustules in the face, are the consequences of high living, or excessive drinking, the best remedy is the aperient sulphureous water, or neutral salts, as directed, No. 2, page 7.

The scaly affections of the skin, or clusters of small pimples, unattended with fever, will gradually yield to the medicines recommended under the head of tartarised antimony wine. (see Nos. 2, 34, 54, and 55,) with the topical application of the ointment, No. 106, page 78.

Diseases of the skin are very numerous, and many of them were obscurely understood, till the late valuable publication by Dr. Willan, who has devoted much time to their investigation. It has been supposed that their variety has been increased by the introduction of cow-pox, but this I do not apprehend to be the case.

When eruptions arise from a *constitutional* cause, they should be considered salutary, and treated *only* by internal remedies. External applications should in no case be employed unless recommended by a medical practitioner, as by their imprudent use, particularly quack remedies (which are chiefly composed of mercury), many lives have been destroyed, by repelling the morbid matter to the brain, lungs, or bowels.

For the chronic inflammations of the skin, appearing in patches over the body, in the spring and autumn, (gene-

rally termed leprosy, and by some, scurvy,) the following medicines I have never known to fail in the most obstinate cases :

Take of precipitated sulphur of antimony, one drachm ; prepared calomel, fifteen grains ; conserve of hips, sufficient to form a mass.—
To be divided into thirty pills.

One to be taken twice a day, with a draught of the compound decoction of sarsaparilla, No. 118, page 81. After taking the pills four days, a little of the following ointment should be rubbed over the parts affected every night :

Take of ointment of nitrated quicksilver ; spermaceti ointment, of each equal parts.

To be well mixed in a *glass* mortar, or with an *ivory* spatula, as metals will decompose the nitrated quicksilver, and thus destroy the efficacy of the ointment.

The eruption termed ringworm is too well known to require description. A very popular, and generally successful application, is, common ink, whose efficacy depends on the quantity of steel it contains. The muriated tincture of steel is equally efficacious, and a much neater application. When it resists this remedy, the nitrated ointment of quicksilver, rubbed over the part every night and morning, will seldom or ever fail to cure it. The solution of the Epsom salt, with sulphur, recommended, No. 2, page 7, will also be very proper.

In all cases of eruptions of the skin, the state of the digestive organs should be particularly attended to. The state of the stomach is often the source of the most obstinate cutaneous affections, and any disorder of it never fails to aggravate them. Before, therefore, an alterative course of medicine be adopted, it will be proper to clear the first passages by an emetic, and a brisk aperient medicine, and

to keep up good digestion by taking a tea-cupful of the compound decoction of sarsaparilla, with two tea-spoonfuls of the tincture of Columbo, two or three times a day, during the use of the alterative medicines. When the disease occurs in a scrofulous habit, the prepared natron, taken as directed, No. 60, will correct the habit of body, and thus prove a powerful auxiliary to the external application.

The diet should consist principally of vegetables, unless the strength of the system be much reduced, when fresh meat may be allowed. Salted and fat meat, high-seasoned dishes, and spirituous liquors should be avoided. Distilled water, or whey, or buttermilk, will afford the best beverage.

Children, from their birth till after teething, are subject to a variety of eruptions of the skin, such as the red-gum, tooth-rashes, nettle-rash, watery eruptions, &c. &c. which, although they differ in appearance, progress, and extent, seem all to arise from the same cause, viz. a vitiated state of the humours from predominating acidity in the stomach, or the milk of an unhealthy nurse. In the treatment of these early eruptions, external applications should never be employed, unless prescribed by a skilful physician or surgeon, or the practitioner be well acquainted with such diseases of infancy. Exposure to cold should be carefully avoided, and the state of the stomach corrected by small doses of magnesia, to which a little cretaceous powder may be added in case the bowels are much disturbed. If the child be of a gross habit of body, the basilic powder will also be proper, as directed, No. 36. As the milk of the nurse is often in fault, she should take a tea-spoonful of the tincture of Columbo, with a little magnesia, in simple pepper-

mint water, two or three times a day, to promote digestion; and to obviate costiveness, by the use of the solution of Epsom salt, as advised No. 2. When the scales of the eruptions of infants become troublesome from hardness, a little spermaceti ointment, or cream, may be applied to them. See *Red Gum*, page 138,

OF EXCORIATIONS.

When excoriation is the consequence of friction, it may be easily cured by applying the spermaceti ointment, No. 41, or the discutient lotion, No. 92; but in case of much inflammation, the emollient poultice, No. 112, will be more proper; and if attended with fever, or a full or bad habit of body, the aperient mixture, No. 62, will also be necessary, and small doses of laudanum, No. 31, after the operation of the opening medicine, if attended with pain. A low diet should be observed till the inflammatory symptoms are gone off. For the *Excoriations of Children*, see *Galling*, 138.

OF FAINTING, OR SYNCOPE.

SYMPTOMS.—A fainting fit begins with a great anxiety about the heart, the pulse and respiration become suddenly weak, and sometimes to such a degree, as to all appearance wholly to cease, with coldness of the extremities, and death-like paleness of the face, &c.

CAUSES.—These fits are most commonly occasioned by excessive evacuations, particularly of blood; they are likewise produced by passions of the mind*, violent pain, im-

* The effects of mental agitation in causing fainting are well known; and when violent, sometimes prevent the re-action of the system, and consequently occasion sudden death.

pediments to the free circulation of blood, as polypus, aneurism, and ossification of the aorta, and probably sometimes the consequence of the communication between the auricles of the heart, which exist during the fœtal state, remaining entire.

TREATMENT.—When the fit is occasioned by excessive evacuations, the body should be immediately placed in an horizontal position, in a current of air, and the acetic acid, or sal volatile, applied to the temples; of the latter of which a tea-spoonful may likewise be given in a little cold water; the extremities should be rubbed with *warm* flannel, and *cold* water sprinkled over the face and neck. After the recovery from the fit, if the patient be much debilitated, he should be supported by a nourishing diet, as beef tea, arrow-root jelly, with a little wine. When the fit arises from pain, the internal use of laudanum will be necessary, as directed No. 31, which, by allaying pain, will in such case prevent a recurrence. When fainting is produced by passions of the mind, and the patient be plethoric, the loss of blood from the arm will be necessary. If debility be the cause, the tonic mixture, No. 77, should be taken, as there directed; and if obstruction of the circulation, from polypus, or organic disease of the heart, much bodily exertion, or whatever tends to hurry on the circulation, should be carefully avoided.

It is no difficult matter, observes Dr. Falconer, to induce a *habit* of fainting in persons endued with great irritability of nerves, and nothing conduces more to increase this, than a *studious solicitude* to avoid every thing that is likely to have that effect. It fixes the mind on the very object we would wish to avoid, and by *augmenting* the effects of *trivial* accidents, multiplies the number of causes

that may produce the disorder dreaded; a firm resolution to resist the effects of frivolous incidents upon the mind, and of course on the nerves, is far preferable. Haller has related a story where a disposition of this kind was conquered by a *vehement exertion* of the will; and almost every person has seen temporary fits of a similar kind put off by the struggles and resolution of the person attacked.

OF FILMS, OR SPECKS ON THE EYE.

For the removal of films, or small specks on the surface of the eyes, the astringent eye water, No. 101, page 76, dropped between the eye-lids two or three times a day, is an efficacious application. If they be attended with much inflammation, the application of a blister to the nape of the neck; the use of the aperient mixture, No. 62; and an alterative bolus of two grains of calomel, No. 34, every night for a week, will likewise be necessary.

If the eye water should not prove sufficiently strong, a little levigated glass, or powdered cuttle-fish bone, should also be blown into the eyes through a quill, every night or morning, or applied mixed with a little honey, by means of a camel hair pencil.

If the patient be of a scrofulous habit, or if the opacity be the consequence of scrofulous inflammation, the mixture, No. 75, page 70, will also be proper; for although the speck or film may appear trifling, it is of great consequence to correct the scrofulous diathesis of the system.

OF FLATULENCE.

So prevalent are flatulent affections of the stomach and intestines in this country, that very few persons are en-

tirely exempt from them. They have, however, by no means met with that attention from the medical profession which their frequency and effects on the constitution demand. Indeed, so little have their causes and nature been investigated, that they have been merely noticed as *symptoms* of indigestion. The gas (vulgarly termed wind) generated in the stomach, is of the carbonic acid kind, probably the effect of a decomposition of vegetable aliment in the stomach, in consequence of weakness of the digestive organs, or error of diet. Flatulence may certainly so far be considered the effect of indigestion. But the gas generated in the *intestines* is of a very different kind, being *inflammable air*, and evidently not altogether the effect of indigestion. This gas is, I believe, always discharged downwards. It is more or less offensive to the smell, being similar to the inflammable gas arising from gutters or stagnant water.

The air evolved in the stomach being evidently the effect of bad digestion, will be considered under the head of *Indigestion*; but as the generation of inflammable gas in the intestines is difficult to account for, I shall notice it here as a *primary* complaint, and, for the sake of distinction, term it *Intestinal Flatulence*.

It is extraordinary that this species of flatulency should have escaped the investigation of Hippocrates, who has so minutely delineated the symptoms of diseases; but at that period, the nature of the different airs was very imperfectly known. Sauvage, in his Nosology, notices two species, viz. the acid* and foetid†, but he considers them

* Flatulentia acida, Spec. 1. Sauv.

† Flatulentia nidorosa, Spec. 2. Sauv.

to differ only as to smell, and as arising from the same source. Nor do I find, that they have been noticed by those pneumatic theorists of the present period, who have endeavoured to prove, that many diseases arise from certain decompositions or combination of airs in the human body, and are to be cured by the exhibition of different gases.

Such as indulge in the free use of spirituous and vinous liquors are most subject to this species of flatulence, and it is remarkable that even the breath of those who are in the habit of frequent intoxication, is strongly impregnated with inflammable gas. Whether this gas be disengaged from the wine or spirit, or whether those liquors, by their chemical action on the inner coat of the intestines, produce a morbid secretion of mucus, and inflammable gas is in consequence generated, I cannot take upon me to say. I have, however, met with patients much affected with this air, who were not *apparently* addicted to the pernicious habit of dram drinking, or of taking wine even in moderate quantity; but from such a circumstance no conclusive inference can be drawn, for those who do not take their cheering glass publicly, may privately. Dr. Trotter is of opinion, that vinous spirit mixes with the blood, "for we know," says this author, "that hydrogen (*i. e.* inflammable air) escapes from the lungs in such quantity as to be perceived in the breath; we are, however, ignorant what combinations this gas, or other parts of the spirit, may form with the human fluids." Dr. Baillie, in his *Morbid Anatomy*, observes, "It is not unusual to find air accumulated in the intestinal canal in greater or less quantity. This air is sometimes accompanied with slight inflammation of the peritonæum, and at other times not. In such

cases, the blood vessels on the intestines are frequently filled with air. There are only two ways in which we can well conceive air to be formed in the intestines. The one is some new arrangement in the *contents* of the intestines by which air is extricated; the other is, the formation of air in the *blood vessels* of the intestines, by a process similar to secretion, and which air is afterwards poured out by the extremities of the exhalant arteries into the cavity of the intestines. That the blood vessels have this power there can be no doubt; and I own," says the Doctor, "that this is a very frequent mode by which air is accumulated in the intestines." Of the nature of this gas, this able anatomist does not give a decided opinion, but observes, "that it requires to be examined by some person well acquainted with chemical experiments, in order that its ingredients may be well ascertained."

Nervous and hypocondriacal patients appear to suffer so considerably from this gas, that I never knew a nervous patient who did not always find himself much benefited by a free expulsion of it; and I have been assured by many, that in proportion to its fœtor, so has been their relief. Even violent head-achs, stupor, palpitations of the heart, horror of mind, dimness of sight, noises in the ears, nervous twitchings, dryness and heat of skin, and a variety of other symptoms, have been speedily relieved by its evacuation. That this inflammable gas enters the blood vessels is obvious, from its passing off by the breath; but whether these nervous affections be thus excited, or whether it be sympathetic of the irritation produced by it on the inner coat of the intestines, cannot be easily determined. That it is the cause of many nervous complaints, I think there can be but little doubt. Water being a com-

position of the inflammable and vital airs, I think it possible that water may be formed in the system by the union of inflammable gas with the oxygen of the blood, and thus produce dropsical swelling, and at the same time, by depriving the blood of this vital principle, induce a dangerous degree of weakness in the system. Such an occurrence is, I think, more probable, than that the condition of the skin should be changed from a perspiring to an imbibing state, which from the accumulation of water has been supposed to be the case in some diseases of emaciation.

I have also observed that those people who are most troubled with inflammable gas, are most liable to head-ach and rheumatic affections on change of weather, and particularly on the approach of rain. See head-ach.

TREATMENT.—The first object in the treatment of this complaint is, to empty the intestines by such active aperient medicines that will also carry off the vitiated slime adhering to the coats, and at the same time excite an healthy action in the mucous glands. For this purpose calomel will answer best, three grains of which may be taken at bed time (made into a pill with a little conserve of hips), and purged off the next day with the solution of Epsom salts, as recommended No. 2, page 7. These medicines should be repeated at least twice a week for a fortnight. In the intermediate time, three table spoonfuls of the following mixture may be taken three times a day :

Take of rhatany root bruised, one ounce ; infuse in twelve ounces of boiling water till cold, then strain, and add diluted vitriolic acid, three drachms ; vitriolated magnesia, two drachms ; compound tincture of cardamom seeds, six drachms.

If the constitution has suffered from the free and continued use of spirituous liquors, the patient should continue to take this mixture for at least three or four weeks.

The Jamaica ginger powder is the best carminative that can be used in this case, as it not only effectually expels the gas, but, I believe, also corrects the secretion of the intestines, and, by stimulating their inner coat, occasions them to throw off an accumulation of mucus; thus, the fæces of people in the habit of using it are generally covered with slime.

It is scarcely necessary to observe, that the patient should abandon the use of spirituous or vinous liquors; if not immediately, at least by degrees, if he be desirous to obtain permanent relief.

It is a very common practice with routine physicians to desire their patients, troubled with this complaint, to abstain, as much as possible, from a vegetable diet. I have known this advice very strictly adhered to, but I have not found that the patients have been the least benefited by it; nor is it to be expected from the nature of the gas, that they would, for the fixed air disengaged from vegetables rather corrects it than otherwise. Indeed, water saturated with fixed air, as the soda water, I have found an excellent palliative, and evidently to correct its fœtor. People that overload their stomachs with animal food are certainly more troubled with this species of flatulency than those who chiefly live on vegetables. A proper admixture of vegetable and animal food I have found best to agree with such patients, and pure water as a beverage.

The cordial medicines of quacks, or what is the same thing, ardent spirits, and wine, often afford flatulent patients some relief, by expelling the air contained in the intestines; they, however, afterwards supply it in greater quantity to the blood, and a patient, encouraged to persevere in the remedy from the transitory relief it affords,

does not discover his error till his constitution has so far suffered, that an increased dose of the cordial becomes absolutely necessary to keep up the vital functions. The mischief that flows from this polluted source of dram drinking is incalculable. The most robust constitution is often ruined by it, and where it does not rapidly undermine the system, it leads to other excesses, which in process of time will infallibly terminate the life of these deluded votaries of pleasure. To say the least of the deleterious effects of dram drinking, how completely does it frustrate the great ends of social intercourse, the promotion of harmony, and the attainment of knowledge—

“That feast of reason, and that flow of soul!”—

How justly, then, may we exclaim, in the emphatic language of the immortal Shakespeare, “Every inordinate cup is unblessed, and the ingredient is a devil.” See nervous diseases.

OF GOUT.

The gout is an hereditary* disease, but sometimes acquired by high living and a sedentary life. The male sex are generally its victims†. It is divided into Regular and

* Dr. Latham, in a late epistolary dissertation addressed to Sir George Baker, denies that it is an *hereditary* disease. That parents do transmit that kind of organization to their offspring, which disposes them to take on a gouty action, no man of experience, or capable of making observations can deny.

† Hippocrates observes, that women seldom have the gout, and never before the age of 45. In his time and country, perhaps, the ladies were more temperate than they were in other countries, or in the present state of *modern refinement*. It appears, however, that the gout was a familiar disease among the Roman ladies; which Seneca, in his 95th Epistle, justly ascribes to the luxurious living and debaucheries in which they indulged without controul.

Irregular. When the inflammation appears in the joints to a *due degree*, and *gradually* disappears, after a certain duration, leaving the patient rather in an improved state of health than otherwise, it is termed *Regular*.

Of the *Irregular* there are three species, viz.

1st, *Atonic*—When the constitution is tainted with gout, but from some cause the *inflammatory* affection of the joints is not produced; the organs of digestion are impaired, and the general health variously affected.

2d, *Retrocedent*—When the inflammation attacks the joints slightly, and suddenly abates and affects an internal part. And,

3d, *Misplaced*—When the gout attacks any of the internal parts, instead of the joints of the extremities.

Of Regular Gout.

A regular fit of the gout rarely comes on till the age of thirty-five, unless the hereditary predisposition is very strong. It attacks sometimes suddenly, but is generally preceded by symptoms of indigestion, as flatulence, loss of appetite, cramp in the stomach, &c. and sometimes by head-ach, stupor, numbness, a sense of pricking in the thighs and legs;—the day preceding the attack, the appetite generally returns much keener than usual. The fit comes on sometimes in the evening, but generally about two or three o'clock in the morning, and for the most part in the spring of the year. The ball of the foot, or joint of the great toe, is commonly the seat of regular gout, the pain and inflammation of which uniformly increase, with more or less of a shivering, which abates as the pain becomes more violent, and is succeeded by a hot stage of the same duration as the pain, and with it gradually de-

clines, when a gentle perspiration comes on, and the patient falls into a much desired sleep.

CAUSES.—The occasional causes of gout appear to be of two kinds, viz. Those which induce a *plethoric* state of the body; and, secondly, those which in such habits induce a state of weakness. Of the first kind may be enumerated, a sedentary indolent manner of life, full diet, especially of animal food, and the great use of wine and other spirituous liquors*; and of the latter class may be noticed, in habits of an hereditary disposition, whatever may, directly or indirectly, tend to diminish the powers of the system,—as excesses of all kinds.

Dr. Cullen considers a fit of the gout as an effort of nature to restore tone and vigour to the nervous system, which she accomplishes by exciting inflammation in their extremities; and this opinion the learned professor supports with a long train of ingenious arguments.

Mr. James Parkinson, who has lately published a dis-

* This disease, the frequent companion of wealth and indolence, has been so often induced by the excess of wine, that in every age it has justly been styled the offspring of Bacchus. This fact is sufficiently substantiated in the records of medicine, for gout is seldom or never seen in the habitations of poverty and labour. In youth, hard drinking is particularly injurious; it brings on premature decay, and, more than any other cause, paves the way for the diseases of age before the meridian of life! But as the organs of digestion are principally concerned in gout, the excess of drinking acts with peculiar force. It is highly probable, that the mere pains and inflammation of the joints are *secondary* symptoms of the complaint, and that the only sure way to ward it off, is, by preserving the vigour of the digestive organs by temperate and abstemious living, and by beginning early in youth to pursue a regular and active mode of life. These are the best securities for a sound constitution, which alone can ensure a *happy* and *healthy* old age.—Trotter on Drunkenness, fol. 113.

sertation on the nature and cure of gout, is of opinion, that in gout, a peculiar saline acrimony exists in the blood, in such proportion as to irritate and excite to morbid action the minute terminations of arteries in certain parts of the body. "When we view," says Mr. Parkinson, "in a person who has been long subject to the gout, the prodigious quantity of this matter which has been separated from the system, forming almost all the smaller joints of the hand into white and apparently cretaceous nodules (vulgarly called chalk stones), we are naturally led to the opinion, that the blood must have been preternaturally charged with this matter, or with the principles of which it is formed." The obvious source of this alleged acrimony of the fluids (of which the uric acid is formed) the author asserts to be impaired digestion, and the introduction of acescent matter into the stomach,—circumstances evidently connected with the gouty diathesis.

Dr. Wollaston, in a paper read before the Royal Society in 1797, demonstrates, that the concretions formed in the joints of gouty persons are composed of an animal acid (termed uric or lithic acid) and soda. Mr. Fourcroy and Dr. G. Pearson also mention the existence of this acid in gouty concretions.

With respect to the nature of gout we are perfectly in the dark, and as the seat of it appears to be the nervous system, we shall probably continue so till we are better acquainted with the functions of the brain.—The principal use of the brain probably, is, to supply the system with a nervous fluid somewhat similar to electric matter, which is conveyed over the body by the nerves. In this sense the brain may be considered a kind of electrical apparatus, and the passage of the blood through it may produce the

nervous fluid. Hence, in proportion to the languid or rapid state of the circulation, the body will be supplied with nervous fluid. Gouty inflammation may be the effect of some diseased structure or impediment in the nervous parts, occasioning an unequal distribution or preternatural collection of nervous fluid. This, however, is a field unexplored, and I flatter myself, I shall soon be enabled to offer some information on this important subject.

TREATMENT.—The treatment of the gouty paroxysm must be varied according to the *age* of the patient, the *natural strength* of his constitution, and more particularly according to his *previous* habits of living. Indeed, so various are the constitutions of gouty people, that it is impossible to lay down a general or invariable plan, either for the cure of the paroxysm, or the prevention of its recurrence, which are the two indications to be attended to in its treatment. On the approach of the fit, it will, in all cases, be proper to clear the stomach and bowels by a brisk aperient medicine, as the cathartic pills, No. 84, page 72. After the due operation of which the following mixture may be taken with considerable advantage ;

Take of camphorated julep, twelve ounces ; volatile salt of hartshorn, two scruples ; sweet spirit of nitre*, two drachms. Mix.

Three table spoonfuls to be taken three, four, or five times a day.

If the stomach be much affected with flatulency, cramp, or vomiting, or the constitution impaired by repeated attacks, or irregular or free living, half an ounce of the vo-

* The sweet spirit of nitre should be fresh and well prepared, otherwise, by neutralizing the salt of hartshorn, it will destroy the property on which its efficacy depends.

lative tincture of guaiacum may be added to the above mixture; and if acidity prevail in the stomach, two drachms of prepared natron. If the patient be advanced in years, or in a very debilitated state, the gout mixture, No. 69, page 66, will answer best.

The liquid laudanum may be given at bed time, to abate the violence of the pain. It, however, by weakening the powers of the stomach, often prolongs the fits, and it is not an uncommon occurrence, after a full dose of laudanum, for the gout to attack the stomach, and even the brain, with such violence as to threaten the life of the patient. It should not, therefore, be employed, unless advised by a regular practitioner, particularly when attended with general debility of the system. The acetic laudanum is much safer, and certainly more efficacious in procuring ease, in cases of gout, than the common laudanum. By its use a patient may obtain a respite a few hours, but the probability is, that it is at the expence of three nights pain.

When the gout attacks the stomach, warm cordials are necessary, as the cardamom, peppermint or aniseed cordials, ether, or tincture of ginger. The feet should likewise be immersed in warm water, and afterwards well rubbed with flannel.

With respect to applications to the affected part, various opinions have been maintained by physicians, both ancient and modern. If the patient be plethoric, and his constitution but little impaired, the extraction of blood from the part by leeches or scarifications, generally abates the pain, and shortens the paroxysm; but in people far advanced in years, or of weakly constitution, death has been known to follow this practice. A blister near the part has been

much recommended by Dr. RUSN, and is much safer and perhaps not less efficacious than topical bleeding.

As spontaneous perspiration of the limb is always attended with very salutary effects, and as we generally find the fit thus to terminate, so I think the vapour bath lately recommended by Dr. Blegborough, very likely to prove beneficial, by exciting perspiration; and I understand in many instances it has assuaged the pain and shortened the paroxysm. The immersion of the limb in cold water, as recommended by Dr. Kinglake, affords more speedy relief than any other application, and I have known many instances in which it has proved highly beneficial; but the cases were in a great measure local, being attended with no affection of the stomach or an impaired constitution, and complicated with rheumatism. It is in anomalous cases, I believe, that it has proved of such immediate and essential benefit in the practice of others; but in the paroxysm of regular gout, where the constitution is debilitated, and especially when the paroxysm is preceded by any affection of the stomach or head, it may be considered an Herculean remedy, and if it does not cure the patient, it will probably kill him by repelling the disease to the stomach or brain, too many instances of which have already been published.

The application of cold water in gout, so far from being a novel practice, was probably the first remedy that was ever employed, as the ancients supposed that contraries were cured by contraries. It is noticed by Hippocrates and Celsus, and since their time has been repeatedly revived, and on very good grounds abandoned.

A gentleman, who has suffered very considerably from frequent attacks of gout, has, within these few years, on

any symptom of an approaching fit, had immediate recourse to a liniment composed of olive oil and vitriolic acid, recommended to him by a mechanic (who it seems has acquired much celebrity for speedily curing the gout); by which he has entirely kept off the fit, and in the first instance cured himself of a very violent attack, by rubbing it well over the part. In a few hours after using it, although at the time confined to his bed, he has been able to walk with ease. It appears to me that this liniment may, from its chemical action on the gouty matter deposited in the part, have a very salutary effect. The soda, by uniting with the sulphuric acid, for which it has a greater attraction than the uric acid, would form a salt more soluble, and therefore more easily removed by the absorbent vessels. Certain, however, it is, that many people who have been conveyed to this man in a sedan, have, after the parts have been well rubbed with this liniment, been able to walk home with ease; it therefore merits a trial, particularly as it is not of a repellent nature. The muriatic acid bath has been found to afford relief, probably on the same principle. The safest method of applying this acid is in the state of vapour, which may be done by means of Dr. Blegborough's vapour-bath, by mixing it with the vapours of warm water.

Since the publication of the last edition of this work, I have given the liniment of vitriolic acid and olive oil a very extensive trial in every stage of gout, and in every instance with wonderful success. One lady, who suffered severely by gout every spring, immediately on its first attack, last March, rubbed the part well with the liniment, and the next day I found her in her drawing-room perfectly well. The recipe for making this liniment is given, page 300.

The seat of gout being evidently the nerves, the heat and pain are no doubt principally occasioned by an accumulation of animal electric matter; hence it has been not improperly termed *nervous* inflammation. In the treatment of gout, it is therefore of consequence to produce a moist state of the skin of the affected part, in order to favour the escape of the superabundant electric matter and caloric. Gently rubbing the surface of the affected part with a soft electric brush, in the manner recommended for rheumatism, by conducting the excess of electric matter from it, I have found highly beneficial, and in many instances to allay the pain in a few minutes.

It is a prevailing opinion, that the gout is not to be cured by *medicine*, but may be effectually prevented by *regimen*; and it is a fact noticed so far back as the time of Galen, that when a fit of the gout has been kept off for three or four years by the use of the tonic medicines, particularly bitters, the patient has always died suddenly, and apparently for the want of a regular fit of the gout.

The prepared natron is much recommended by Mr. Parkinson, for the purpose of destroying acidity in the stomach, which he considers the principal cause of gout. Alkaline medicines have long been employed for that purpose, and by some highly extolled. The mixture, already recommended, page 292, will not only correct acidity, but prevent its formation.

An American physician some time since recommended the hop as a remedy for gout. In consequence of its anodyne property, it may in some degree assuage the pain; but as a stomachic medicine, it is very inferior to columbo or chamomile flowers. It has been observed by an experienced physician, that gouty people who have been in the

habit of using malt liquor, strongly impregnated with the virtue of the hop, generally die suddenly.

Gouty subjects are much affected with inflammable gas in the intestines, the expulsion of which uniformly affords relief; and it is not unworthy of notice, that this air is discharged from the system in greater quantity as the fit approaches to its termination; its free expulsion I have, therefore, always considered a favourable import. The prevention of such an accumulation is certainly of some importance in the treatment of gout. The Jamaica ginger powder, for this purpose, has answered much better than any other aromatic, on account of its warming and invigorating the stomach and bowels, without increasing that feverish state of the constitution which spirituous liquors and the spices, abounding with an essential oil, are very liable to produce. The Jamaica ginger has been much esteemed as a remedy for gout by a few eminent practitioners, and instances have been adduced, in which it proved highly beneficial, particularly in the case of Sir Joseph Banks, by Mr. Stenhouse, which brought it into general use. In the prevention of gout it is a very valuable medicine; but during the paroxysm, or when the system is attended with much fever, or plethora, the propriety of exhibiting it in the dose recommended by Mr. Stenhouse, is much to be questioned.

A fit of the gout in constitutions predisposed to the disease, is often excited by passions of the mind, and in many instances has been suddenly terminated by the same means. Van Swieten relates, from Hildanus, that a man, disguised to represent a ghost or spectre, took another labouring under a gouty paroxysm out of his bed, and carried him upon his back down stairs, dragging his feet and

legs, which were the seat of his pains, down the steps, and placed him at last on the ground. The man thus treated, immediately recovered the use of his limbs, and ran up stairs again with great swiftness, and under the strongest impression of terror. After this incident he lived many years free from any symptom of the gout. This celebrated author also relates a case of a man being cured by a very opposite passion: a person, says he, who had for forty years been afflicted with the gout, was condemned to capital punishment, and in consequence thereof led to execution. Just when he expected death, he received an un-hoped-for pardon, which affected his limbs in such a manner, as to restore to them activity and strength, whereas before that event their use was nearly lost; this person, as well as the other, lived many years totally free from the gout; and that celebrated physiologist, Haller, quotes a case still more extraordinary, of a cure of the gout by a violent fit of anger.

With respect to the management of the mind during a paroxysm of gout, Dr. Falconer judiciously observes, "our practice must be directed not to excite, but to moderate such passions as are symptoms of the disorder itself, and to endeavour to restore, by any safe means*, that calmness and tranquillity of mind which those who are subject to the gout find on the going off of the fit." Whatever rouses the powers of the mind certainly shortens a paroxysm, while that which depresses it will both bring it on and prolong it.

* Charms were as much in use for the gout among the physicians of antiquity, as for any other disease; and perhaps when we consider the periodical nature of the complaint, we may not entirely discredit their efficacy.

REGIMEN.—The diet, during a paroxysm of the gout, must also be regulated according to the patient's accustomed mode of living, the state of the constitution, and the violence of the symptoms. If the patient has been in the habit of indulging in high seasoned dishes and the free use of spirituous and vinous liquors, now is not the time to abandon them entirely, particularly if he be affected with symptoms of indigestion, or the powers of the system be reduced by repeated attacks of gout, or age: they, however, should be allowed in moderation. In other cases a low regimen should be strictly adhered to, and an abstinence from spirits and fermented liquors should also be enjoined.

When the stomach is not disordered, the soda water affords an excellent beverage, as it abates fever, promotes digestion, and in many respects will prove very beneficial. If it should be too cold for the stomach, a little fine ginger powder may be taken with it*. Water purified by distillation, is recommended by Dr. Lambe, as a common beverage for gouty patients. This author has lately published many instances in which its adoption was attended with the most decided and permanent advantage.

When any swelling or stiffness of a joint remains after the fit has ceased, it may be removed by the diligent use of the flesh-brush, gentle exercise of the parts, and in case

* The soda water generally sold, being made with vitriolic acid and potash, I would advise every gouty subject that is desirous to give it a trial, to procure an apparatus for making it. A gouty gentleman, a few months since, was near losing his life through drinking half a pint of soda water, containing vitriolic acid. It brought on such a violent spasm in his stomach, that his recovery was doubtful for three or four hours.

it proves obstinate, the following liniment may be well rubbed over the part for half an hour, and afterward washed off with warm water, and the part wiped dry:

Take of olive oil, an ounce and a half; vitriolic acid, two drachms.

Drop the vitriolic acid into the oil by degrees, and after every ten drops, shake the bottle.

A chair has lately been invented by Mr. Pocock, of Southampton-street, for the use of invalids, which I have found to afford great comfort to gouty and other patients.

PREVENTION.—The prevention of gout may be best effected by regimen, and by attention to the digestive organs. Temperance, and exercise proportioned to the strength of the patient, will conjointly prove the best preventive. Accustomed habits of high-seasoned dishes and spirituous and vinous liquors, should be *gradually* abandoned, particularly if the patient be advanced in life, or his constitution much debilitated. As the quantity of cordials and rich dishes are diminished, so should the degree of exercise be increased. It is by a *total* change in the manners of life that such rooted constitutional diseases are to be conquered. If a gouty patient has resolution to avoid the temptations of the table, and to reduce by degrees the quantity of wine to two glasses a day, he may still have little cause to regret his former indulgences. Particular attention should be paid to the state of the digestive organs, and especially to the prevention of acidity in the stomach; on any symptom of indigestion, it would be therefore adviseable to take a dose of the cathartic pills, No. 84, and the compound tincture of ginger and chamomile, No. 7, occasionally, or a small tea-spoonful of ginger powder two or three times a day. It would also be proper to avoid all kinds of fermented liquors, and to

take for the common beverage pure water. The instructions given for the treatment of indigestion, equally apply to the prevention of gout.

As there is a disposition in gout to return in spring and autumn, greater attention to an abstemious diet at those periods will be particularly necessary. The pills recommended, No. 84, page 72, and the solution of prepared natron, No. 60, with the use of the tincture of ginger and chamomile, No. 7, should also be resorted to on any symptoms denoting the approach of a paroxysm, by which means the recurrence of the disease may be generally prevented. The feet should always be kept dry and warm by means of flannel, or horse hair socks—flannel next the skin will likewise be proper.

Of Atonic Gout.

The cure of this species of gout consists in improving the general health of the patient; for this purpose the stomachic mixture, No. 61, or two tea-spoonfuls of the volatile tincture of cascarilla, should be taken with an infusion of Jamaica ginger, or the compound tincture of Jamaica ginger and chamomile, No. 7. In case of nausea at the stomach, an emetic of ipecacuan powder, No. 23, and a dose of equal parts of tincture of senna, No. 8, and tincture of rhubarb, No. 4, should precede the use of these medicines. A generous diet and moderate exercise are indispensably requisite. The feet should be kept warm by the use of flannel socks and cork-soled shoes.

Of Retrocedent Gout.

When gout affects the stomach and intestines, relief is to be attempted without delay, by the free exhibition of

warm brandy and water, with a little ginger powder; and if they do not prove sufficiently potent, ardent spirit must be employed. A dessert spoonful of ether has, in this case, answered very well, to which half an ounce of paregoric elixir, will prove an useful addition. The bowels should be fomented, and the feet put in warm water, and afterwards rubbed with the flour of mustard-seed. When gout attacks the head, the same means are to be pursued, with the addition of a large blister to the scalp. A strong mustard poultice to the feet may likewise be substituted for the warm water. When it affects the lungs, half an ounce of the paregoric elixir, with a tea-spoonful of ether and sal volatile should be given occasionally, a blister applied over the breast-bone, and a mustard poultice to the feet.

Of Misplaced Gout.

When, instead of the usual determination to the joints, the inflammation falls on the lungs, or any internal part, it often requires to be treated as a *primary inflammatory* affection, by blood-letting, application of blisters over the part and to the extremities, and the use of aperient and sudorific medicines. But these cases are always so much involved in ambiguity as to render them very improper for domestic medicine; they often perplex even practitioners of experience, and I have no doubt but by the injudicious exhibition of cordials in one case and bleeding in another, many lives have been destroyed. Nothing, therefore, should be done (unless in cases of great emergency) without the sanction of a medical man of experience and judgment. If, however, the life of the patient be in imminent danger, and no experienced practitioner be at hand, a tea-

spoonful of spirit of sal volatile, and two of ether may be given in cold water, and the mustard poultice, No. 111 page 79, applied over the stomach, and to the feet.

OF THE GRAVEL AND STONE.

The gravel consists in the evacuation of small sand-like concretions, formed in the kidneys. In passing through the tubes (termed ureters) to the bladder, they often occasion a degree of pain, more or less acute, according to the size and form. When a piece happens to be too large to pass off with the urine from the bladder, it gradually enlarges, and forms what is termed the *Stone*, which, when smooth and round, is often attended with very trifling inconvenience. In course of time it becomes troublesome, from its weight and size, by producing, independent of local inconvenience, numbness in the thighs, and spasms in the calves of the legs, from its pressure on the nerves leading to those parts. When the surface of the stone is hagged, or its form angular, it often produces considerable irritation and mischief in the bladder, occasioning slimy discharge with the urine, and not unfrequently a quantity of blood, a frequent inclination to make water and go to stool, attended with acute pain. A calculous concretion is sometimes found in the bladders of very young children; they are also formed in persons of middle and advanced age. Men are more subject to stone than women, probably because a small stone or gravel will escape through the urethra of women, which would be detained in the bladder of a man.

CAUSE.—Hippocrates was the first who observed that these concretions were the consequences of hard water; and this opinion has been very generally adopted. Dr.

Lister has recently confirmed it by an observation, that the inhabitants of Paris, who use much *hard* water in their aliment and beverage, are peculiarly subject to this disease; and Dr. Percival informs us, that a gentleman and lady in Manchester, who had suffered much from gravel, were greatly benefited by discontinuing the use of their pump-water, which was unusually hard, and drinking in its stead the *soft* water of a neighbouring spring. So beneficial was this change to the lady, that she did not experience the least symptom of the disorder for upwards of two years.

Many practitioners, from an analysis of the stone, have attributed their formation to the use of *acids*: was this, however, really the case, we should expect to find the disease most prevalent in those counties where an acid beverage is principally employed. The cider in Herefordshire* is generally drank in a state nearly approaching to vinegar, and yet in no county in England are calculous complaints more uncommon. Some authors attribute the disease to impaired digestion, to which may be added, a deranged state of the secretory vessels of the kidneys, by which the blood is there disposed to new combinations, the effect of which is the production of calculous matter.

TREATMENT.—When the gravel or a small stone is passing from the kidneys to the bladder, it often produces considerable pain, frequently attended with nausea or vomiting, which constitute what is termed a fit of the gravel. During this period the principal object of practice should

* It is worthy of remark, that a case of stone has not occurred at the General Hospital of this county since its establishment, being a period of thirty years.

be to relax the parts, and thus obviate inflammation, by the loss of blood from the arm, particularly if the patient be of a plethoric habit; the bowels should be rendered soluble by doses of castor oil, No 3, and lavemens of gruel, the latter of which will not only assist the operation of the castor oil, but act as a fomentation to the parts affected; for this purpose, the liquid should be injected by means of a large syringe, that it may be thrown higher up into the bowels than by the bladder and pipe usually employed. The warm bath, by relaxing the system, will prove a great auxiliary to these means. After the operation of the castor oil, from ten or twenty drops of laudanum may be given, according to the severity of the pain.

The diet during the fit should be low, and the beverage the almond emulsion, barley water, decoction of marsh-mallow root, or linseed tea.

When the calculus has passed into the bladder, which is known by the cessation of the pain, the patient should take the pills, No. 81, with the aerated soda water, as recommended under the head of Prepared Natron, No. 60. Dr. Falconer, of Bath, has published several cases, in which this water proved very beneficial; and in my own practice I have found it to succeed better than any other diuretic medicine. The carbonate of natron is also a very excellent remedy, and probably more powerful than the aerated soda water (see Prepared Natron, No. 60). An infusion of the wild carrot seed has been found to afford great relief in gravel, and the leaves of the bear's whortleberry have certainly proved useful in many instances of stone and gravel, particularly when attended with great

pain, and coffee-coloured or bloody urine. Two or three ounces of the following infusion of these leaves may be taken two or three times a-day.

Take of the leaves of the bear's whortleberry, three drachms ; infuse in a pint of boiling water till cold, then strain for use.

Spirit of turpentine, balsam of copaivi, sweet spirit of nitre, and soap lees, have occasionally proved beneficial, and, after the failure of the preparations of natron, are well worth a trial.

Distilled water has proved in many instances so very beneficial in gravelly complaints, that I am inclined to believe, if a person was to make use of no other beverage, and employ it in every article of diet, the complaint would entirely leave him.

OF GUTTA SERENA.

Gutta serena is a species of blindness, without any apparent disease or fault in the eye, except a dilatation of the pupil. When there is a *total* loss of vision, the disease is said to be *perfect*, and imperfect when there is a power of distinguishing light from darkness.

CAUSES.—This disease consists in a paralytic affection of the optic nerve, in consequence either of compression, debility, or poison.

TREATMENT.—Although three causes are enumerated as producing this disease, the mode of treatment to be pursued for the recovery of the optic nerve is the same. A seton or a perpetual blister to the nape of the neck, should be employed, and the discharge kept up for at least two or three months, unless contra-indicated by *increasing* debility of the system. As an internal remedy, mercury, in

alterative doses, is the most efficacious; and as its good effects depend more on its removing obstruction than on stimulating the nerve, its use should be persevered in till the constitution is sufficiently under its influence (known by a slight swelling of the gums and an increased secretion of saliva), as there are many instances on record that have been cured by salivation after other medicines had failed. The muriate of mercury is generally recommended; but calomel will certainly have as good an effect, and, on account of being much milder, is, in domestic practice, entitled to the preference. Calomel may be administered by making half a drachm into twenty pills with a little conserve of hips: one of which may be taken every forenoon and at bed-time, till the gums become swelled and tender, when they should be discontinued for a week. It will likewise be proper to snuff up the nostrils a little of the compound asarabacca powder every night: or the following powder, which is much recommended by Mr. Ware:

Take of turbith mineral, one grain; liquorice powder, eight grains.

Of which that celebrated oculist advises, one fourth to be snuffed up the nostrils once or twice a day.

As a stimulating application to the balls of the eyes, an infusion of Cayenne pepper, (made by steeping eight grains of the pepper pods, bruised, in half a pint of cold distilled water in a close vessel for three hours, when it should be filtered through paper for use,) has been employed with success; two or three drops are to be conveyed between the eye-lids twice a day, and to be persisted in for a considerable time. It appears this application has been used with success at the Liverpool Infirmary. The pain it excites is, however, often so acute as to require great fortitude

in the patient to bear it for a sufficient length of time. When the patient will not submit to it, the electric sparks applied to the eyes twice a day, for six or eight minutes, will often answer as well, and perhaps in most instances better. If an evident distension of the vessels of the head exist, the loss of blood from the temple, either by opening the temporal artery, or by leeches, or from the nape of the head by cupping, will be necessary. If accompanied with general plethora, twelve ounces of blood should be taken from the arm; and in case of suppression or retention of the menstrual evacuation, the loss of blood will be proper, either local or general, according to the state of the system. In this latter case, the remedies recommended for the retention of the menses should be employed. See *Menstruation*.

HÆMOPTOE. See *Spitting of Blood*.

OF HEAD-ACH.

No complaint is perhaps more prevalent in this country than head-ach. It is generally not considered a *primary* affection, but as arising from a variety of causes, such as general, or *local* plethora, in consequence of suppression of customary evacuations and obstructed perspiration. When such head-ach occurs in a person disposed to apoplexy, and attended with giddiness, pulsating sensation in the head, and noises in the ears, it should be considered a *premonitory* symptom of apoplexy, and the preventive means recommended for that disease, page 188, should be employed without delay.

Head-ach is frequently of a rheumatic nature, when the skull bones are principally affected. In this case the pa-

tient will experience a slight pain on pressing the scalp; such head-ach often alternates with pain in the shoulder, or some other parts of the body.

Head-ach is very often the consequence both of an *increased* and *diminished* excitement of the brain, when it is termed *Nervous Head-ach*. This species is generally produced by close application of the mind, particularly on abstruse subjects. Females are very subject to this complaint from constitutional causes. It is often periodical, and sometimes very regular in its diurnal attacks. This species is often attendant on debility of the system, and is produced by great evacuations, as loss of blood, frequent suckling of children, &c. See *Nervous Diseases*.

Head-ach is likewise very often symptomatic of indigestion; for so great is the sympathy between the brain and stomach, that it is often difficult to determine which is really in fault. For people who are subject to preternatural determination of blood to the brain, are always more or less affected with indigestion, nausea, &c. in consequence of the slight compression of the brain from distension of blood vessels. When it arises from a foul state of the stomach, it is generally termed sick head-ach, and is speedily relieved by vomiting. A kind of nervous head-ach, is, I am persuaded, not unfrequently occasioned by inflammable gas. How this air should produce head-ach is difficult to determine; but certain it is, that the most obstinate head-achs are often relieved by the expulsion of such air from the intestines. Dr. Baillie states, that it is not unusual to find air extricated in the vessels of the membranes of the brain, he thinks, by some new arrangement of the particles of the blood. Those who have had

an opportunity of observing the morbid appearances of the brain, so frequently exhibited on dissection, will neither be surprised at the frequency or the obstinacy of complaints of the head; but on the contrary, from the disease that is so often found in the membranes and the tumours in the substance of the brain, that the sufferings of the patients were not much greater. A deposition of earthy matter in the coats of arteries is often the cause of head-ach; and I believe the blood vessels are more frequently the seat of the pain than the brain itself. The blood vessels are not only subject to a chronic inflammation, of which the deposition of earthy matter is the effect, but also to ulceration, which, by destroying the coats of the vessel, blood becomes effused within the head, and fatal apoplexy produced; hence apoplexy is not always the consequence of distention of the vessels, as is generally imagined.

TREATMENT.—When head-ach arises from *distension* of the vessels of the brain, the loss of blood will be proper, either by leeches or cupping; or if attended with a plethoric habit of body, ten or twelve ounces of blood taken from the arm will prove more beneficial; which, with the use of the cathartic pills, No. 84, page 72, and a spare diet and exercise, will generally effect a cure. If it resists those remedies, a blister should also be applied to the nape of the neck, and the feet immersed for ten or fifteen minutes in warm water, and afterwards kept warm by flannel socks. Ether may likewise be applied to the temples and forehead, and cold water to the head. People subject to this species of head-ach will receive great benefit from having their head shaved, by washing it every morning with *cold* water, and by keeping the feet warm

with flannel socks. The means recommended for the prevention of apoplexy, page 188, are applicable to this species of head-ach.

For the *rheumatic head-ach*, the tincture of guaiacum, as directed No. 20, page 25, warm fomentations, the cathartic pill, No. 84, page 72, small doses of the antimonial powder, No. 37, and the warm bath, are the most powerful remedies. If it be attended with general plenitude, the loss of blood by leeches or cupping, and a blister to the nape of the neck, will also be proper. The aperient sulphureous water, taken as directed page 9, has in many instances entirely cured the patient, after other apparently more active medicines had failed. See *Rheumatism*.

For the cure of the nervous *head-ach*, the exciting cause should be avoided, and whatever is likely to irritate the mind. If the digestive organs be affected, an emetic should precede the exhibition of other medicines; after the due operation of which the following mixture will prove highly beneficial:

Take of essential salt of the rhatany root, three drachms; camphorated julep, three ounces; compound spirit of ammonia, three drachms; mint water, eight ounces.

Three table-spoonfuls to be taken three times a day.

If the patient be subject to costiveness, three drachms of the vitriolated magnesia may be added to the above mixture, or, in case of acidity predominating in the stomach, two drachms of the prepared natron. I have had repeated opportunities of giving this medicine a trial in very obstinate cases of nervous head-ach, and in no one instance has it failed to produce the desired effect.

Ether may likewise be applied over the part of the head most affected, as directed page 19, and a little of the fol-

lowing powder snuffed up the nostril, once every twenty-four hours, which, by exciting sneezing and producing a discharge from the inner membrane of the nostrils, often affords instantaneous relief.

Take of the leaves of tobacco, one ounce; ditto of rosemary, six drachms; ditto asarabacca, two drachms; white hellebore root, two drachms.

The articles should be carefully dried and reduced to a fine powder.

If the patient be troubled with flatulency, a little ginger powder may be taken in the common beverage.

When head-ach arises from indigestion, which is a very common cause of complaints of the head, the directions for the treatment of indigestion will succeed in curing it. See *Indigestion*.

Electricity has been much recommended as a remedy for head-ach, and the application of the electric aura to the head has often given relief; it, however, frequently recurs with increased violence after its use, and when the disorder has arisen from fulness of the blood-vessels of the brain, it has so increased the determination of blood to the head as to produce apoplexy.

The application of ether to the temples, washing the head with cold water, the cephalic snuff, (noticed above), a blister to the nape of the neck, keeping the feet warm by wearing flannel socks, attention to the state of the digestive organs, and avoiding full meals and spirituous or vinous liquors, with moderate exercise, will, generally speaking, prove highly beneficial in mitigating, if not effectually curing habitual or chronic head-achs, from whatever cause they may arise; but in acute head-achs from obstructed perspiration, or attendant on fevers, those remedies may not

be proper, particularly the application of cold water, ether, or the sneezing powder. The cure of such head-ach must depend on the nature of the complaint of which it is a symptom. In chronic or periodical head-ach, it is likewise of consequence to attend to the secretions of the head, particularly of the ears and nostrils: by increasing the former by introducing a little lambs wool moistened with camphorated oil, and the latter by the cephalic powder before noticed, the most obstinate head-achs have been effectually cured; and I have known many instances of the most violent head-ach terminating in a sudden secretion of a quantity of wax in the ears. Such directions may appear trifling to many; but in the cure of head-ach they are often of greater efficacy than the most potent medicine.

On the treatment and cause of head-ach, I shall make further observations under the head of nervous diseases.

OF HEARTBURN.

Hearthburn consists in an acute burning sensation about the pit of the stomach, sometimes attended with great anxiety, difficulty of breathing, acid eructations, flatulence, inquietude, and retching to vomit. It is generally the consequence of bad digestion, and a frequent attendant on pregnancy.

CAUSES.—The acidity producing the pain in the stomach, commonly, but improperly, termed heartburn, has been supposed to be the effect of fermentation of vegetable food, in consequence of weakness of the digestive organs; but it is very doubtful whether fermentation ever takes place in the stomach, or if it does, whether it be of the acetous kind, as generally imagined. Mr. Parkinson thinks

it very improbable, from the animal matter present, and by the difference of time requisite to effect the changes of the two fermentations (the vinous and acetous). In the gastric fermentation, this intelligent author observes, “the changes are effected with much greater rapidity than in the acetous. Some days are necessary for the duration of the *acetous* fermentation before vinegar is produced; but very frequently within a few minutes after taking a glass of weak wine, sour belching will denote the existence of a strong acid in the stomach. The difference of the acids affords another objection. The acid produced in the stomach yields a taste very dissimilar to that of vinegar: those who are subject to the unpleasant occurrence of acid eructations, say that its taste is very different from that of vinegar, and that it also affects the organs of taste in other respects in a peculiar manner.” Mr. Parkinson concludes, that “the acid thus formed, is rather of an animal than vegetable nature.” A deficiency of the mucus, which defends the coats of the stomach, the irritation of pungent or spicy aliments, and ulceration or organic diseases of the stomach, are causes of heartburn.

CURE.—The treatment of heartburn must depend on its exciting cause. When it is produced by acidity in the stomach, and the bowels are confined, or in a regular state, magnesia, No. 1, or prepared natron, No. 60, or salt of wormwood, No. 21, taken as directed under their respective heads, will, by neutralizing the acid, speedily relieve the pain; but when the bowels are too much disturbed, or the patient subject to habitual purging, the cretaceous powder, No. 29, or lime water, page 93, will answer best; and as the stomach is always more or less in fault, some bitter medicine should accompany the use of

these remedies, in order to prevent its recurrence : for this purpose the following mixture, if not attended with purging, will prove very beneficial, after the operation of an emetic :

Take of prepared natron, No. 60, a drachm and half, Sp. sal volatile, one drachm ; tincture of ginger and chamomile, No. 7, three drachms ; pure water, seven ounces.

Two table-spoonfuls to be taken three times a day. If the patient have an aversion to medicine in liquid form, the following pills will prove equally efficacious :

Take of extract of chamomile flowers, one drachm ; dried natron, half a drachm ; powdered rhubarb, one scruple ; oil of caraway seeds eight drops.

Mix well together and divide into twenty-four pills, two or three of which are to be taken twice a day.

A draught of spring water generally affords relief, by diluting the acidity in the stomach. The diluted vitriolic acid, taken as directed No. 18, will often succeed in curing heartburn after the absorbent and alkaline remedies have failed to remove it entirely, by preventing the formation of gastric acid. The same rules as to diet and exercise should be observed, as recommended in cases of indigestion.

If the pain should recur, notwithstanding the use of these remedies and proper attention to diet, and the patient be advanced in years, an organic disease of the stomach may be suspected, when the use of alterative medicines as calomel and soda, may also be necessary ; in which case the advice of an experienced practitioner should be taken.

When a deficiency of mucus is the cause, animal jelly will be proper ; and when it occurs in a gouty habit, two tea-spoonfuls of the volatile tincture of cascarilla, in a wine-

glassful of lime water, every three or four hours, will generally afford relief. See *Prevention of Gout*.

When it accompanies pregnancy, the solution of Epsom salt, as directed page 7, with the use of the diluted vitriolic acid, No. 18, has in my practice uniformly succeeded; but such cases often require a variety of treatment, according as it is attended with a relaxed or costive state of the bowels, debility, and plethora.

OF HECTIC FEVER.

This is a symptomatic fever, and generally produced by an absorption of pus; hence it is an attendant on ulcerations of the lungs, and other internal suppurations; the formation of matter in the joints, and sometimes large abscesses on the surface of the body. When the symptoms run high it often resembles an intermittent fever, and, by unskilful practitioners, is not unfrequently mistaken for it. The fever returns every day, with noon and evening accessions. In the morning there is a considerable *remission*, but never a *complete intermission*. It is for the most part attended with night sweat, and the urine on standing deposits a bran-like sediment. Its treatment of course depends on the nature of the *primary* affection. See *Pulmonary Consumption*.

OF HICCUP, OR HICCOUGH.

Hiccup is a spasmodic affection of the midriff, and generally arises from irritation produced by acidity in the stomach, error of diet, poison, &c.

CURE.—When acidity is the cause, twenty-five drops of sal volatile, No. 13, with a tea-spoonful of magnesia, No. 1, in a glass of pure water, will afford relief, and its recurrence may be prevented by the use of the tonic mixture,

No. 77, page 70. When it is the consequence of improper food, an emetic will be necessary; and when produced by poison, the means recommended for counteracting the effects of poison should be immediately resorted to.

If it should continue obstinate, or amount to spasms, a tea-spoonful of ether, with eight drops of laudanum, in a glass of cold water, will prove the best remedy. Ether may likewise be applied to the pit of the stomach, and the feet immersed in warm water.

This affection is often cured by whatever *suddenly* arrests the attention, whether the passion connected therewith be of the stimulating or debilitating kind.

In children hiccup is often produced by the irritation of acidity in the stomach, in consequence of being overfed; in which case magnesia and rhubarb, in a little mint-water, afford the best remedy; but when it occurs in bowel complaints of long standing, the compound cretaeous powder will prove more beneficial. People subject to hiccup should particularly attend to the directions given for the prevention of indigestion. See *Indigestion*.

OF THE HOOPING, OR CHIN-COUGH.

This disorder is generally considered to be infectious. It is often epidemic, and occurs but once in a life-time; hence children are generally the subjects of it.

SYMPTOMS.—It commences with the symptoms of common cough, from cold. It gradually becomes more violent till it is evidently convulsive, the patient not being able, often for a considerable time, to respire; and at length respiration is effected with a shrill kind of noise, like the crowing of a cock. These fits are, for the most part, attended with so great a determination to the head, that blood

is often discharged from the nose or mouth. The eyes appear much swelled, and the fit often terminates in vomiting. It is seldom attended with continued fever.

CAUSES.—It is apparently produced by a contagion of a specific nature*. With respect to the seat of the disease, there are a variety of opinions. Dr. Butter, who has written expressly on the subject, refers it to the intestines; and observes, that neither the stomach or lungs are concerned in it! Walschmeid says, it proceeds from a disorder of the stomach. Hoffman attributes it to thin and acrid juices in the air vessels of the lungs; and others, with more apparent probability, assert, that it arises from a convulsive action of the midriff. It evidently commences in the lungs, and afterwards extends to the midriff, the violent spasmodic affection of the muscles of which, occasions the hooping noise.

TREATMENT.—The cure should be attempted first by an emetic of the tartarised antimony wine, No. 16, and afterwards the mixture†, No. 76, page 70. The pectoral plaster, No. 108, page 78, should be applied to the pit of the stomach; and if the patient be plethoric, a blister between the shoulders, and the loss of a few ounces of blood, should not be omitted‡. In the early stage of the com-

* If this disease be produced by the introduction of a specific contagion into the system, it is very extraordinary that it should principally affect the muscles of the midriff.

† The efficacy of this medicine principally depends on the asafœtida it contains, which, on account of its nauseousness, is generally rejected by children. In such case it may be given clysterwise, by dissolving ten grains of asafœtida gum in three or four ounces of gruel.

‡ If the patient be of a scrofulous habit or consumptive make, this advice should not be neglected, unless contra-indicated by great weakness of the system.

plaint, these remedies will generally prove sufficient to effect a cure; but if by neglect the disease be once established, it will often run its course in defiance of the most powerful medicines.

This disorder may often be effectually cured by putting the system under the temporary influence of the vegetable poisons; for this purpose the extracts of hemlock, the henbane, and deadly night-shade, have been employed by different practitioners, and each have their advocates. As children are differently affected by these medicines, it is impossible to give a general form for their exhibition; for unless a certain effect be produced in the system to counteract the action of the contagion, it will prove of no avail. The hemlock is much recommended by Dr. Butter, who relates twenty cases that were cured by it: this author prefers the extract; but the powder of the herb is unquestionably the best preparation, and the only one to be relied on. Some physicians prescribe it with other medicines, as syrup of poppies, ipecacuan, and oxymel of squills; but as they may destroy its peculiar operation on the constitution, it should be given only in a very simple vehicle. I have generally employed the following form, and when properly managed so as to affect the system, which is manifested by nausea and giddiness, I have never known it to fail.

Take of powdered hemlock leaves, one scruple; mint water, two ounces; simple syrup, two drachms. Mix.

A tea-spoonful to be given three times a day, to a child of any age, increasing the dose each time about ten drops, till it produces the effects above noticed.

An emetic should always precede the use of this medicine; and if acidity prevail in the stomach, the occasional exhibition of magnesia, as directed No. 1, or prepared

natron, No. 60, will also be necessary, to which a little rhubarb powder may be added in case of costiveness. The extract of tobacco, in the dose of one or two grains, dissolved in a little simple water, is a very favourite remedy for hooping-cough with the physicians in Germany. It is certainly more safe than hemlock, henbane, or the deadly night-shade, and probably not less, if not more efficacious. The application of a blister over the breast-bone, or between the shoulders, should on no occasion be neglected, particularly if the child be born of consumptive or scrofulous parents; it will prevent much mischief, and if it happen to produce strangury, it will, without any auxiliary, cure the disease. The almost immediate cessation of the disease in consequence of strangury, has induced many practitioners to give the tincture of cantharides in small doses of ten drops, with a view of exciting that affection; and when it succeeds in this effect, it never fails to cure the disease.

When the disease has continued some weeks, and appears to be kept up by debility of the system or indigestion, the rhatany root, or bark, combined with soda, will prove very beneficial, in the following form :

Take of decoction of rhatany root, or of Peruvian bark, six ounces ;
prepared soda, one drachm ; tincture of cardamom seeds, half an
ounce. Mix.

From one to two table-spoonfuls to be taken three times a day.

It requires, however, much judgment to determine when such medicines are proper ; for, although the patient may be much reduced, there may be a preternatural distension of the vessels of the lungs, or disposition in them to inflammation, in which cases any strengthening medicine would assuredly prove very injurious.

Dr. Hugh Smith, after observing that emetics occasionally repeated are of great service, and blisters, when the symptoms are urgent, directs the following:

Take of musk julep, six ounces; paregoric elixir, half an ounce; volatile tincture of valerian, one drachm.

Two or three table-spoonfuls to be taken every three or four hours.

The tincture of artificial musk has been lately much recommended as a specific for hooping-cough. It is given in the dose of ten to twenty drops, in a little barley water, two or three times a day.

The acetated ceruse, when *judiciously* administered, I believe to be a certain remedy for hooping-cough. It may be given in the following manner:

Take of acetated ceruse, four grains; syrup of poppies, two drachms; dill water, two ounces. Mix.

Two tea-spoonfuls to be given to a child of two years to ten, and a dessert-spoonful to an adult, every five hours. This mixture generally succeeds in curing the disease in three days, after which its use should be gradually discontinued in three more. It is a very powerful medicine, and should be employed only under the direction of a medical man, as in the hands of ignorance it may be productive of bad effects.

This disease, as I observed before, if uninterrupted by medicine, will run a certain course; but it frequently happens, that after the usual period, the cough continues from habit; in which case change of air will be of essential service, and generally cure it in a few days. The diet should be adapted to the strength and age of the child. In general, equal parts of barley water and fresh milk will be sufficient both for the common beverage and diet.

When the disease resists the ordinary means above suggested, the basiliac powder, as directed No 36, will prove very beneficial, especially if the patient be affected with worms. When the cough is become of a chronic nature, it may often, if not always, be cured by keeping up an healthy digestion, and by adopting a regimen that is not likely to disorder the stomach. See *Indigestion*.

When this disease proves fatal, it is either by producing convulsions or inflammation of the lungs or brain; and in scrofulous habits, consumption of the lungs; the prevention of which should be a principal object of practice*. *See also* *Animal Poisons*.

HYDROPHOBIA. See *Animal Poisons*.

OF HYPOCHONDRIAC AFFECTION.

(Commonly called *Vapours*, or *Low Spirits*.)

This disease is distinguished by a concurrence of the following circumstances:—A languor, listlessness, or want of resolution and activity, with respect to all undertakings; a disposition to seriousness, sadness, and timidity as to all future events; an apprehension of the worst or most unhappy state of them, and therefore often, on slight grounds, a dread of great evil. Such persons are particularly attentive to the state of their own health, and to the smallest change of feeling in their bodies; from any unusual sensation, perhaps of the slightest kind, they apprehend great danger, and even death itself; and, in res-

* The existence of worms in the stomach is often a cause of the obstinacy of this disease. I have known several instances of its ceasing soon after an evacuation of worms.

pect to all these feelings and apprehensions, there is, for the most part, unfortunately, the most obstinate belief and persuasion. It is generally attended with symptoms of indigestion, but not always; also hysterical affections, and sometimes with melancholy.

This turn of mind seldom appears early in life, and more usually in advanced age; but when it has once taken place, it generally goes on increasing. It is chiefly to be attributed to imbecility of mind, or weakness of imagination, and when far advanced, may be considered little less than a species of insanity, arising from a want of that natural energy of mind, or proper education, which might have induced the person to have engaged in the rational pursuits and pleasures of life.

TREATMENT.—No disorder admits of greater scope for the management of the passions, perhaps, than hypochondriasis, which manifests itself in its effects on the mind and spirit. Greater delicacy, however, is here requisite than is generally allowed by practitioners. It is the practice of such patients often to change their medical attendants, which is certainly not altogether inconsistent; for if the physician do not admit the *reality* of the disease, it is not to be supposed that he will take much pains in curing it, or to avert a danger of which he entertains no apprehension. The sufferers are mostly of a gloomy disposition, and subject to great despondency of mind concerning their own situation in point of relief, and want cordials and exhilarating remedies to the mind as well as the body. To treat such disorders as merely imaginary, generally irritates choler, and impresses a belief that their friends have but little concern for their safety and welfare; and on the other hand, to coincide in opinion concerning the melancholy

situation of such persons, depresses the spirits, and tends above all things to aggravate the complaint. The most judicious course seems to be, to endeavour to excite the fortitude of the sufferers, by representing to them it is unworthy a brave and resolute character to be always complaining of misfortunes which are, in a great measure, the common lot of mankind; that it is more manly to struggle with ill fortune than to sink without resistance beneath its pressure. The learned Sauvage observes, that the attendants on such persons should constantly endeavour to abstract their mind as much as possible from reflecting on their own situation and condition of health.

The *firm* persuasion that generally prevails in such patients, do not allow their feelings to be treated as imaginary, nor their apprehensions of danger to be considered as groundless, though we may be persuaded it is the case in both respects. Such patients are not to be treated either by raillery or reasoning. Dr. Alexander observes, the best way is to keep the mind closely engaged in some useful or agreeable pursuits; hence we learn the superior advantages of those situations in life which more immediately call for intellectual exertions and bodily exercises. “Industry seldom fails to place us above want, and activity serves us instead of physic.” In fact, none are so wretched as those who have nothing to do: they are useless to others, they are a burden to themselves*. Constantly impressed with the apprehension of some imaginary evil, they either become the victims of despondency, or the

* “Absence of occupation is not rest,—

“A mind quite vacant is a mind distressed!”

dupes of ignorant and unprincipled pretenders to physic, whose sole aim seems to be that of enriching themselves at the expence of the follies or conceits of mankind*.

As it is the nature of man to indulge every present emotion, so the hypochondriac cherishes his fears, and attentive to every feeling, finds, in trifles as light as air, a strong confirmation of his apprehensions; his cure, therefore, depends upon the interruption of his attention, or upon its being diverted to other objects than his own feelings. Whatever aversion to application of any kind may appear, there is certainly nothing more pernicious to them than absolute idleness, or a vacancy from all earnest pursuits. It is owing to wealth admitting of indolence, and leading to the pursuit of transitory and unsatisfying amusements, or to that of exhausting pleasures only, that the present times exhibit to us so many melancholy instances of this depraved state of imagination. The mind should not only be diverted from this bodily affection, &c. by employments suitable to the circumstances and situation in life, and unattended with much emotion, anxiety, or fatigue; but also various kinds of sport and hunting, which, when pursued with some ardour and attended with exercise, if not too violent, are amongst the most useful. Within doors, company which engages attention, willingly yielded to, and is at the same time of a cheerful kind, will

* If, in any case, the pious fraud of what is termed a placebo be allowable, it seems to be in treating hypochondriacs, who, anxious for relief, are fond of medicines, and though often disappointed, will still take every new nostrum that can be proposed to them. Hence they generally become the dupes of designing quacks; and it is a well known fact, that many Jew pedlars, cobblers, and carpenters, have amassed considerable wealth by imposing on them their nervous cordials, &c.

be always found of great service. Play, in which some skill is required, and where the stake is not an object of much anxiety, if not too long protracted, may often be admitted. Music, to a nice ear, is a hazardous amusement, as long attention to it is very fatiguing.

When amusements of every kind are rejected, mechanical means of interrupting thought are the remedies to be sought for. Walking is seldom of this kind, though, as gratifying to the restlessness of hypochondriacs, it has sometimes been found useful. The required interruption of thought is best obtained by riding on horseback, or in driving a carriage of any kind. The exercise of sailing, unless in an open boat, engaging some attention, does very little service. Exercise in an easy carriage, in the direction of which the traveller takes no practice, unless it be on rough roads, or driven pretty quickly, and of long continuance, is of little advantage. The exercise that will prove most effectual, is that which is employed in the pursuit of a journey; first, because it withdraws a person from many objects of uneasiness and care which might present themselves at home—secondly, as it engages the person in more constant exercise, and in a greater degree than is commonly taken in airing near home—and lastly, as it is constantly presenting new objects which call forth a person's attention. The symptoms of indigestion and hysteric complaints that so frequently attend this state of mind, although the effect rather than the cause, are objects of practice, inasmuch as they tend to aggravate and realise the false apprehensions of the patient. These secondary affections require the same mode of treatment as recommended for indigestion and the hysteric disease. Warm bathing, the drinking of tea and coffee, which are extremely

hurtful to people with bad digestion, generally afford relief to the hypochondriac.

The ancient physicians referred the cause of this disease to some morbid state of the parts of the body situated beneath the spurious ribs on both sides, technically termed *hypochondria*; hence it was named by them the hypochondriac disease; and it must be allowed that the unfortunate state of mind constituting hypochondriasis, is often the effect of some obstruction in the liver, or loaded state of the spleen. In such cases, the following medicines will prove very beneficial, by removing visceral obstructions, promoting digestion, and preventing that accumulation of inflammable air in the intestines, with which hypochondriacs are more or less affected, and to which alone such patients attribute their sufferings, and probably is a principal cause of the mental distress and nervous irritability.

Take of Rufus's pill, one drachm; prepared calomel, fifteen grains.
Mix.

Divide into fifteen pills; three to be taken two or three times a week, and three table-spoonfuls of the following mixture, two or three times a day:

Take of prepared natron, two drachms; extract of rhatany root, three drachms; aromatic tincture of rhatany, one ounce; pure water, ten ounces. Mix.

The same rules as are given for the diet of people affected with indigestion, should likewise be observed by hypochondriacs.—See *Indigestion and Nervous Diseases*.

Hypochondriasis is often accompanied with false and perverted notions of the Deity, with gloomy views of life, and with a lingering dread of death. On this occasion we can defy the reproaches which are so often thrown out on the *uncertainty* of medicine, and recommend a *certain* cure;—a corroborant for the mind, and a cordial for the

heart. If the curiosity of the reader be excited by this declaration, I trust that his hopes will not be disappointed, when I refer him to the doctrine of the New Testament. That doctrine impresses the most cheering notions of the Creator, as the father and friend of man; who is studiously promoting our greatest good in all the varied circumstances of our lives;—it teaches us that we are constantly under his guard and protection; and that even the sufferings which he inflicts, are intended for our benefit. Here we may find a solution for every anxious doubt, and a place of refuge for every intrusive care. Hence we learn that life is only a probationary state; that it must consequently be chequered with good and evil, in order to form a school of wisdom, in which virtue may be disciplined for the fruition of eternity. To that eternity it teaches us that death is the vestibule; and consequently that the termination of our mortal existence, which is often such an object of horror to the hypochondriac, ought to be regarded only as the commencement of unspeakable serenity and joy. But as the melancholy, which harrasses the peace of the hypochondriac, is often shaded with the sombre tint of superstition, those religious books should be particularly perused which, without insisting on any points of doctrinal uncertainty, tend to inspire a rational and elevated piety, the principles of which consist in the love of God, and in unfeigned good-will to all mankind.

It is, however, of the utmost consequence that hypochondriacal subjects avoid the extremes of every kind in religion. In recommending it therefore to their attention, we should be careful that by seeking to escape one rock, we do not split on another. Superstition and enthusiasm, it must be remembered are two powerful sources of delu-

sion, and in the hypochondriac either of them might be productive of insanity. That devotion is best which is most rational and well founded, and which consequently teaches man to regard the great moral duties of christianity. The prevailing temper of the mind is often formed by religion. Intercourse with supreme perfection, cannot therefore but ennoble and strengthen it. The pure love of God, naturally connects itself with the love of man, hence devotion humanizes our manners, tames our unruly passions, and exalts and strengthens the mind. It smooths what is rough, and softens what is fierce in our nature. It promotes an humble submission to the decrees of heaven, and cheerful contentment with our lot. Studious as the hypochondriac is to preserve life, it is very common for him to rail against it, and to enquire what is there in it that renders it desirable? Life is the voluntary gift of God, and if it be deemed by omniscience worth bestowing, surely it ill becomes us to attempt to form an estimate of it. The devout man regards it, with all its interests, as but a very small part of human existence, and by looking forward to immortality, discovers fresh subjects of admiration and gratitude—He says to his Creator, “let the men of the world have *their portion in this life; be it mine, to behold thy face in righteousness, and when I awake, to be satisfied with thy likeness.*”

OF THE HYSTERIC PASSION.

This disease almost confined to females, consists in an increased irritability of the nervous system, and is consequently produced by whatever weakens or renders the body irritable.

SYMPTOMS.—The hysteric fit commonly begins with

some pain and fullness in the left side of the abdomen, from which a ball* seems to move with a grumbling noise into the other parts of the bowels, and making as it were various convolutions, seems to move into the stomach, and more distinctly still, rises up to the top of the gullet, where it remains for some time, and by compressing the windpipe, gives a sense of suffocation, when the patient is affected with a stupor and insensibility, and the body agitated with various convulsions; commonly the convulsive motion of one arm is that of beating the breast very violently and repeatedly with the closed fist. This state continues for some time, with slight remissions and renewals of the convulsive motions, which at length cease, leaving the patient in a stupid and seemingly sleeping state. More or less suddenly, and frequently with repeated sighing and sobbing, together with a murmuring noise in the bowels, the patient returns to the exercise of sense and motion, and generally without any recollection of the several circumstances that had taken place during the fit.

In females, this disease occurs from the age of puberty to that of thirty-five years; and very rarely appears before the former, or after the latter of these periods, and generally occurs about the time of menstruation: it affects the barren more than the breeding women, and the sanguine and robust more than the phlegmatic and melancholic.

It sometimes arises in young women from a peculiar

* This sensation is usually termed the *Hysteric Ball*, and is probably produced by a spasmodic contraction of the muscles of the gullet.

turn of mind, when the passions are high, and the imagination heated.*

TREATMENT.—The fit may be relieved by the anti-hysteric mixture†, No. 65, page 68, to each dose of which, in obstinate cases, a tea spoonful of ether, and ten drops of laudanum, may be added. The feet should be immersed in warm water, and spirit of hartshorn, or smelling salts, applied to the nostrils, and cold water sprinkled over the face. If the patient be incapable of swallowing, two drachms of the tincture of asafoetida may be administered clysterwise, in half a pint of gruel; and in case the subject be young and plethoric, the loss of six or eight ounces of blood from the arm will be necessary: bleeding, however, should not be employed, without the sanction of a medical practitioner.

Hysteric fits often arise from a disordered state of the digestive organs; or at any rate, the nervous system is rendered irritable by it, and of course favourable to hysteric affections. During the absence of the fit, it will therefore

* A late author justly observes, “ that the novels that fill our circulating libraries, which are read with avidity both by mothers and daughters, under the mask of morality, are more injurious to female virtue than the most openly licentious and immodest publications.”

† It is remarkable that the most nauseous medicines in the *Materia Medica* were recommended by the ancient physicians, and are still employed in the treatment of hysterical complaints. As these remedies produce no salutary effect when administered *during* the hysteric paroxysm, it is probable that their operation on the body arises from the disgust they produce in the mind; and as the ancients paid more attention to the management of the mind during disease than the moderns, it was perhaps with this view that they were first prescribed.

be proper to strengthen the stomach, and of course the nervous system, by the use of the tonic mixture, No. 77, page 70, as there directed, to which a drachm of prepared natron may be added in case acidity prevails in the stomach. Costiveness should likewise be obviated, by taking every morning a dose of the solution of the Epsom salt, as recommended page 8; cold bathing will also prove very beneficial by diminishing the irritability of the nervous system.

A morbid sensibility appears always to accompany this complaint, which is very liable to be excited by the passions of the mind. The learned Sauvage observes, nothing contributes to aggravate it more than indolence and vacancy of mind. Dr. Falconer, therefore, judiciously observes, that some interesting pursuit that will occupy the attention, should by all means be sought and assiduously followed. Even fear itself, gradually introduced, and where no imminent danger is apprehended, has been efficacious in preventing this disorder. The displeasure of a parent, supposed likely to be incurred by the return of the hysteric fit, has contributed to prevent it; and it is noticed by this able writer, that during the troubles in Scotland in the years 1745 and 1746, this disease scarcely made its appearance. Hysteric fits are very apt to recur on the sight of people so affected. Dr. Falconer observes, that he once had an opportunity of seeing an instance of this kind at a public watering place: a lady was seized with hysteric convulsions during the time of divine service; in less than a minute six persons were affected in a similar manner, some of whom had never before been subject to such attacks, but were notwith-

standing violently agitated and convulsed both in body and mind. - But though such instances as these show the propriety of prudent caution, yet *too great* a solicitude to avoid every thing likely to give uneasiness, especially if such solicitude be very apparent, is likely to do as much mischief as service. Nothing so much enhances the apprehension of danger, or so often causes those on whose account the care is taken, to believe the hazard is greater than it really is ; and such circumstances frequently recurring, keep them perpetually in a state of painful irritability, which in reality constitutes the disorder. It would be much better to inure such persons *gradually* to the common occurrences of life, and to the occasional mention of such things, which if not magnified by the relators, or dwelt on as meriting particular attention, will come in time to be disregarded and their effects destroyed. Instead of this, it is too usual with parents to foster the sensibility of their children, especially females, to an unnatural degree, by officious attention to remove every thing that can give the least interruption to pleasure, or even awake the mind to its natural and necessary exertions. Affection contributes its share to enhance these complaints : an *unnatural* and *morbid sensibility* is often encouraged under the idea of *delicacy* and *tender feelings* ; and even sickness itself is sometimes feigned, as being imagined, however falsely, a mark of a disposition of this kind. But if we take the trouble of examining human nature more accurately, we shall find that the *liberal* and *truly amiable virtues* of *humanity* and *benevolence*, are much more frequently found in persons of a *steady* mind and temper, who have experienced variety of fortune, than in those who have passed their lives in an uniform course of luxurious indulgence.

which always generate selfish and mean ideas and sentiments*.

It is remarked by an eminent moralist †, that men who have met with an *uniform* compliance with their will, are inclined to cruelty and severity. A mixture of adverse with prosperous fortune is necessary to inspire humanity and pity.

DISTINCTION.—The hypochondriac affection in women is often mistaken for this disease: it may, however, be distinguished from hypochondriasis, by its occurring at the *early* period of puberty, while the hypochondriasis does not occur till after the age of thirty-five: hysterics likewise attack the *sanguine* and *plethoric*; but hypochondriasis the *melancholic*.

OF INCONTINENCE OF URINE.

This disease consists in an involuntary evacuation of urine, or an inability to retain it.

CAUSES.—It is generally the consequence of weakness or palsy of the muscle of the bladder; sometimes it arises from calculous concretions, irritating the neck of the bladder, or from injury of parts in the operation for extracting the stone; from pressure of the womb in a state of pregnancy, and very frequently in women from a communication between the bladder and vagina.

TREATMENT.—When it arises from the want of tone or power in the muscular fibres of the bladder, a blister should be applied to the lower part of the back-bone, or to the part termed the perinæum. The tonic mixture,

* See Falconer on the Passions, page 134.

† Montesquieu.

No. 77, page 70, should be taken as there directed, with ten drops of tincture of cantharides in each dose, which, with cold bathing, electricity, and a generous diet, will probably succeed in recovering the tone of the bladder.—When it is occasioned by stone or gravel, it requires the same treatment as already recommended for the latter disease. When the effect of injury sustained in the operation for the stone, great relief is afforded in males by the pressure of the instruments called Jugum, and in females by the globular Pessary. When it is produced by an impregnated womb, an horizontal position should be observed as much as possible. When a communication exists between the bladder and vagina, it will, I am fearful, neither admit of cure nor relief. This distressing case is generally produced by inflammation, and consequent ulceration, succeeding difficult parturition. It is often attributed to palsy or loss of tone in the muscular fibres of the bladder, and as such I have frequently known it treated by routine physicians, who have been considered eminent by the public, to the great injury of the patient; practitioners should therefore satisfy their minds as to the *real cause* of the disease, before they prescribe *active* remedies for its cure.

OF INDIGESTION.

SYMPTOMS.—A loss of appetite, transient distensions of the stomach and bowels from flatulency, often attended with eructations, heart-burn, generally costiveness, squeamishness, sometimes vomiting; the body at length, not being properly nourished, becomes emaciated and much debilitated, sometimes attended with nervous irritability and different morbid affections.

CAUSES.—It is generally supposed to arise from a loss of tone in the muscular fibres of the stomach*, induced by the too free use of spirituous liquors †, by poor diet, the over distension of the stomach, too great a quantity of warm relaxing liquors, as tea and coffee, acid unripe fruit, an indolent and sedentary life, close application, or anxiety of the mind, or whatever may tend to weaken the digestive organs. A vitiated or deficient secretion of the gastric juice is likewise often the cause of bad digestion.

One cause of indigestion is a slight compression of the brain, by over distension of the blood vessels of the head; hence the plethoric and people predisposed to apoplexy are very subject to symptoms of indigestion.

The prevalency of indigestion in this country is to be attributed chiefly to inactive life, error of diet, and the great use of spirituous and vinous liquors. With respect to our natural food, the formation of the teeth as well as intestines, prove that we are destined to live both on animal and vegetable aliment; and thus we find the flesh of animals with a proportionate quantity of vegetables, to agree best with the stomach of persons in health, and to afford the most substantial nourishment to the

* Weakness or relaxation of the stomach, is not perhaps so frequently the cause of indigestion as a morbid secretion of the gastric juice, or a deficiency of bile, as the symptoms of indigestion frequently occur to the most robust people, in whom weakness of the stomach cannot be suspected.

† There are so many organs concerned in the process of digestion, and the formation of chyle and blood, that we cannot be surprised at the effects of hard drinking in deranging them; want of appetite and bad digestion are the common complaints of drunkards, the frequent use of spirits, by injuring the coats of the stomach, occasions a vitiated secretion of the gastric juice.

body*. It is not, however, in the quality, but the *quantity* of food, in which man generally errs. No greater quantity should be taken than is required by nature to supply the waste the body has sustained, which will depend on the degree of exercise or fatigue it has gone through. The quantity should therefore be proportioned to the degree of exertion the body has undergone, and not to the *artificial* appetites excited by the use of bitters or spirituous liquors. That nothing strengthens the digestive organs more than an *active* life, is evinced by the great appetite and good digestion of people who are compelled by necessity to earn their bread by their daily exertions†; indolence is therefore one cause of indigestion in this country, particularly among ladies of fashion. The principal cause, perhaps, among gentlemen, is the abuse of spirituous liquors; I mean the practice of drinking a quantity of wine during and after dinner. The port and sherry wine consumed in this country are mixed with a quantity of strong brandy or alcohol, to adapt it to the British palate, and render it fit for keeping: so that instead of being a pure wine, it is in reality a proof spirit; indeed, such is the quantity of spirit in port wine, that I have obtained nearly six ounces of alcohol from a quart. This spirit is extremely pernicious to animal life, and its repeated use will assuredly, sooner or later, destroy the constitution of the most robust. After the stomach has

* What is the exact proportion of animal and vegetable nourishment which is most conducive to health, cannot perhaps be fully ascertained; but we may admit it as a general rule, that two-thirds or three-fourths of vegetables to one-third or fourth of animal food, is the most proper.

† Dissection demonstrates, that the coats of the stomach of a labouring man, are very considerably thicker and stronger than those of a sedentary person.

been accustomed to its stimulus, it requires a repetition to keep up its effects, and as life advances, so an additional quantity becomes necessary; thus the inner coat of the stomach is injured, the pylorus often rendered schirrous, and the gastric juice will, of course, be vitiated*, and the foundation of the most distressing complaints that can possibly assail the human frame laid before the meridian of life! The great numbers that die of schirrosity of the pylorus† (which terminates in cancer) and apo-

* The effects of a morbid secretion of the gastric juice are generally, if not always, erroneously attributed to a vitiated state of the bile.—See *Bilious Affections*.

† Ardent spirit hardens and contracts the animal fibre, and coagulates the juices; hence the sensibility of different organs is gradually exhausted, and the vessels for conveying fluids are lessened in their diameter, and ultimately obstructed. A schirrus of the pylorus and liver especially, are frequent concomitants of habitual inebriety. But the intestines, the pancreas, spleen, and perhaps the kidneys, are also liable to the same affection, all of which are, after a certain time, incurable, and often speedily fatal. The dram and purl drinkers may sooner experience these evils than other drunkards; but even the guggler of small beer has no security against them: nay, so sure and uniform is this effect of producing diseased bowels by fermented liquors, that in distilleries and breweries where hogs and poultry are fed on the sediments of barrels, their livers and other viscera are observed to be enlarged and hardened like those of the human body; and were these animals not killed at a certain period, their flesh would be unfit to eat, and their bodies become emaciated.—Trotter on Drunkenness, p. 114.—See also Baillie's *Morbid Anatomy*, *Diseases of the Liver*, and Morgagni de *Causis et Sedibus ubiunque de Sectionibus Temulentorum* disserunt. Several well-authenticated cases of spontaneous combustion of the human body, in consequence of the long immoderate use of spirituous liquors, have been published in England and on the continent*, by gentleman of unquestionable veracity. The Transactions of the Royal Society

* By Pierre Aimie Lair, in the *Journal de Physique*, Pluvoise, year 8. Branchini, Mossei, Rolli, Le Cat, Vicq, d'Azyr, and several men distinguished for their learning, have given certain testimony of the fact.

plexy*, brought on by the abuse of spirits, is a melancholy proof of this assertion. Independent of superabundant alcohol in wine, I have also detected a quantity of lead; indeed, this practice is become so prevalent, on account of the pleasant astringency it imparts to it, that I thought it incumbent to give directions for making a test for its detection† (see *Cream of Tartar*). It is a very common question to medical men, what wine is the most salubrious, or less likely to disturb the system? This question may be answered in a few words.—The British wines, in consequence of containing much saccharine matter, are very liable to become acid in the stomach. The foreign white wines are better fermented, but possess no virtue over diluted spirit; in fact they are nothing more or less than a diluted spirit. Port wine may be considered a white wine, with the addition of an astringent matter, and therefore a stomachic, but on account of the quantity of spirit it contains, a very bad one. Claret wine contains very little spirit, and also possesses astringency, and is perhaps the most salubrious wine imported into this country, but on account of its weakness it is, like the

of London present a remarkable instance of this species of combustion, attested by a great number of eye witnesses, in the parish of St. Clement, Ipswich. The extraordinary occurrence became the subject of many learned discussions, the particulars of which, with several other similar cases, are to be found in Dr. Trotter's late Essay on Drunkenness.

* The use of spirituous liquors, by stimulating the sanguiferous system, and thus producing determination of blood to the brain, is, no doubt, a principal cause of the frequency of apoplexy and sudden deaths in this country.

† Lead thus swallowed, not only injures the stomach, but produces the most obstinate and dangerous species of colic, which often terminates in inflammation of the intestines.

British wine, very liable to become acescent. This disposition is, however, in some degree counteracted by its astringent quality.

Invalids generally attribute the effects of indigestion to the insalubrity of animal or vegetable aliment ; thus articles are often deemed improper for food, which, in an healthy stomach, would form the most nourishing chyle. Thus on consulting the numerous treatises on diet and regimen, which have been lately published, we find the public cautioned against the use of articles either on account of their being subject to produce acidity, flatulence, &c. &c. effects which can be attributed only to the debilitated state of the digestive organs ; as is sufficiently proved by the labourer never suffering from indigestion, whatever be the food he takes.

Three kinds of appetites may be observed, viz. the *natural appetite*, which is equally stimulated and satisfied with the most simple dish as with the most palatable ; the *artificial appetite*, or that excited by stomachic elixirs, spirits, pickles, digestive salts, &c. and which remains only as long as the operation of these stimulants continue ; and the *habitual appetite*, or that by which we accustom ourselves to take meals at certain hours, and frequently without any appetite. The true and healthy appetite alone can ascertain the quantity of aliment proper for the individual. If, in that state, we no longer relish a common dish, it may be regarded a certain criterion of its disagreeing with the digestive organs. If, after dinner, we feel ourselves as cheerful as before it, we may be assured we have taken a proper meal ; for, if the proper measure be exceeded, torpor and relaxation will be the necessary consequences ; the faculty of digestion will be impaired, and a variety of complaints gradually induced.

TREATMENT.—The cure of indigestion depends on restoring the tone of the stomach, and avoiding the occasional causes. For the first purpose it will be proper to evacuate the stomach by the emetic powder, No. 88, after which the stomachic mixture, No. 61, page 67, or the tonic mixture, No 77, page 70, may be taken with advantage. (See *Rhatany Root*). Two drachms of the Epsom salt, may likewise be taken every other morning, to increase the peristaltic motion of the intestines, and remove redundant slime. If acidity prevails in the stomach, two drachms of prepared natron. No. 60, may be added to either of the mixtures recommended above. In debilitated, gouty, or languid constitutions, the volatile tincture of cascarilla, with the powder of the Jamaica ginger, will prove an excellent remedy.

Quassia root has lately been much recommended in cases of indigestion ; but from its poisonous effects on insects and small animals, which it speedily destroys, I cannot consider it a safe remedy.

The extract of chamomile * was a very favourite stomachic medicine with the late Dr. Cam, of Hereford ; it may be taken in the following manner :

* It is worthy of remark that the *long use* of bitter medicines has been found ultimately to impair the digestive organs ; and it is a well established fact, that gouty people, who have been in the habit of taking bitter cordials, generally die suddenly. The quantity of quassia or other injurious bitters employed by brewers in making beer and porter, has, no doubt, been a principal cause of the frequency of stomach and bowel complaints in the metropolis. The narcotics, that likewise enter the composition of table-beer and porter, as opium, coculus indicus (very favourite ingredients with some public brewers of the present day), must not only do irreparable injury to the stomach and bowels, but from their continued use, prove very hurtful to the constitution.

Take of extract of chamomile, one drachm ; purified natron, one drachm ; tincture of ginger, two drachms ; mint water, six ounces.
Mix.

Three table spoonfuls to be taken three times a day : if pills be preferred by the patient, it may be taken with equal advantage in the following form :

Take of extract of chamomile, one drachm ; dried natron, half do. powdered rhubarb, one scruple ; oil of carraway seeds, ten drops ; syrup of ginger, sufficient to form twenty-four pills,

Two to be taken two or three times a day.

The compound tincture of ginger and chamomile flowers is also a very excellent remedy for indigestion, when attended with much flatulence, see No. 7, page 13. If there be a deficiency of the biliary secretion, which may be known by the pale or dark appearance of the fæces, a grain of prepared calomel should also be taken every other night, for about ten days or a fortnight. The decoction of sarsaparilla root is much recommended by Mr. Abernethy to accompany the use of small doses of calomel in such cases, but it is not so efficacious as the stomachic mixture, No. 61, or tincture of ginger and chamomile.

Till the stomach is restored to a healthy state by these means, such a diet should be adopted as will coincide with the remedies, and not aggravate the symptoms. Vegetable food, and particularly leaven bread, being disposed to fermentation, should be taken very sparingly. The diet should consist principally of animal food, which, in weakly stomachs, will digest better than vegetables alone; and even if spirituous liquors were the chief agents in producing the disease, they should not *now* be abandoned entirely; for as wine and malt liquor will soon turn acid, spirits will prove beneficial by checking fermentation and keeping up the action of the stomach; a little brandy, diluted with

water, may therefore be allowed. If the patient be subject to gout, ginger may likewise be taken in the quantity directed for gout. To this treatment, exercise will prove a very powerful auxiliary.

In very obstinate cases of indigestion, attended with cramp in the stomach, irregularity of the bowels, and flatulence, the following mixture will prove an admirable remedy, particularly in elderly people :

Take of extract of rhatany root, two drachms ; aromatic tincture of ditto, one ounce ; prepared natron, two drachms ; pure water, ten ounces.

Two or three table-spoonfuls to be taken three times a day. This medicine will not only invigorate the digestive organs, but correct the secretions of the stomach and intestines, and thus promote the health of the body.

When the stomach is evidently disturbed by over distension of the blood vessels of the head, it will be necessary to keep the bowels open, to observe a low diet, and to increase the circulation of the blood in the extremities, by the use of flannel socks, flesh brush, &c. and if attended with pain in the head, stupor, or giddiness, a blister should be applied to the nape of the neck ; and if the patient be of a full habit, the loss of eight or ten ounces of blood from the arm, or by cupping, will also be proper. Such patients will receive great benefit by confining their beverage to pure water.

PREVENTION.—It must appear evident from the foregoing observations on the causes of this disease, that the most effectual prevention consists in, 1st, properly exercising the body ; 2dly, proportioning the quantity of food to the degree of exercise* ; and 3dly, relinquishing the use

* It is not an easy matter to ascertain the exact quantity of food proper for every age, sex, and constitution ; the best rule

of spirituous or vinous liquors; but if sufficient bodily exertions cannot be taken, and an artificial appetite must be produced by stimulating the digestive organs, such stimulants should be employed as will not injure the coats of the stomach, or by accelerating the circulation, produce a determination to the brain. Of this class, ginger, Cayenne pepper, and well seasoned pickles, are the most innocent and effectual. Of wines, genuine claret is probably the most salutary beverage, in the quantity of a glass or two after meals; but this wine is too often mixed with English brandy, which entirely destroys its salubrious property. The wine that will blaze on being thrown in the fire, may be pronounced unwholesome.

Such as are in the habit of drinking a quantity of spirit, or spirituous wines, will receive great relief by taking distilled water at meals*, instead of wine or malt liquors, which will in a great measure obviate the injurious effects

is to avoid extremes. Three meals in a day are as many as nature requires, and certainly as much as the stomach can *properly* digest—dinner ought to form the chief of these. Hearty suppers, particularly of meat, in which some people indulge themselves previous to their retiring to rest, are highly prejudicial to health: hence the old adage,

“Great suppers a very great evil we call;

“That your sleep may be sound let your supper be small.”

* While we are eating, water is certainly the best beverage. The custom of drinking fermented liquors, and particularly wine during dinner, is a very pernicious one. The idea that it assists digestion, is false; for those who are acquainted with chemistry, know that food is hardened and rendered less digestible by these: and the stimulus which wine gives to the stomach is not necessary, excepting to those who have exhausted the excitability of that organ by the excessive use of strong liquors. If food want diluting, water is the best diluent, and will prevent the rising, as it is called, of strong food, more effectually than wine or spirits.

of an over quantity of spirit or wine. I have known cases of indigestion from the use of spirits, attended with symptoms of a diseased pylorus, cured by the patient's drinking at meal times, nothing but distilled water, and gradually diminishing the quantity of wine, till it was reduced from eight glasses to one in a day.

On the proper digestion of our food and its consequent conversion into healthy chyle, not only depends the health of the body, but frequently the success of the treatment of the various diseases that assail the human frame, especially those of a chronic kind. It is to an impaired digestion, and the consequent formation of acidity in the stomach, that many obstinate complaints may be traced, as already noticed under the heads of bilious complaints, heart-burn, and flatulency. Indigestion is very frequently an exciting cause of those diseases to which the constitution is predisposed, and without which would probably have never been brought into action, such as scrofula, white swelling, cancer, rickets, consumption, hypochondriasis, insanity, calculous complaints, inveterate ulcers, &c. &c. The prevention of indigestion is therefore not only of the utmost importance in preserving the health of the body and fortifying it against the accession of contagious or putrid effluvia, but also in rendering constitutional diseases dormant, and thus preventing local mischief: to those preventive means I shall therefore frequently have occasion to refer in the course of this work, and which in domestic medicine should be particularly attended to.

OF INFLAMMATORY FEVER.

SYMPTOMS.—Inflammatory fever is distinguished by an increased heat of the body *without any intermisson*, attended with a throbbing, generally pungent, but sometimes dull and heavy pain in the head; the face appearing red and bloated; the pulse strong, full, and frequent; great thirst; sense of general lassitude; the urine high-coloured, and on standing, deposits a brick-dust-like sediment; the tongue is generally covered with a white fur; the judgment much impaired, and rest disturbed.

CAUSES.—Whatever tends to quicken the circulation of the blood will, under certain circumstances produce this fever, as severe pain, over exertions of the body or mind, immoderate use of spirituous liquors, high living, exposure to the heat of the sun, the repulsion or absorption of morbid humors, accidents, exposure to cold, and seldom by putrid or infectious vapours.

TREATMENT.—The action of the arterial system should first be diminished by blood-letting, after which the dose of two grains of emetic tartar, No. 35, will often, by emptying the stomach and bowels*, and producing a determination to the skin, check its further progress. If the fever, however, continues, the saline mixture may be taken, as

* In the treatment of fevers, emetics are the most powerful instruments, perhaps, the *Materia Medica* affords. They not only cleanse the alimentary canal, but tend to remove visceral obstructions by exciting the action of the absorbent vessels; they emulge the biliary duct, occasion an equality of circulation throughout the system, and induce perspiration; hence, by carrying off offensive matter from the stomach and intestines, and at the same time producing so many healthy actions in the system, they often speedily terminate inflammatory fevers.

directed under the head of crystallized acid of lemon, No. 22, and the perspiration kept up by small doses of ten or twenty drops of tartarised antimony wine, No. 16, with warm diluent liquids, as barley-water, common whey, &c. and the body rendered laxative by means of the Epsom or Rochelle salt, as directed No. 2. In all fevers, but particularly the inflammatory kind, it is of great consequence to produce and keep up perspiration. The evaporation of perspirable matter from the surface of the body, by conducting heat from the system, is more beneficial than any single remedy. A dry skin, on the contrary, by favouring the accumulation of heat, never fails to aggravate all the symptoms. If there be considerable determination of blood to the head, the application of leeches to the temples, a blister in the nape of the neck, and the immersion of the feet in warm water, should not be neglected; and if the patient complains of stitches in the chest and difficulty of breathing, the loss of blood should be repeated, and a blister applied over the breast-bone. If, when the fever is almost entirely gone off, the delirium, for want of sleep, should continue, ten or twelve drops of laudanum, No. 31, may be given in a dose of the saline mixture. The diet should be principally arrow-root jelly, barley-water, gruel, or tapioca, without spices or wine, till the inflammatory symptoms are considerably abated.

The application of cold water to the surface of the body, was much recommended by the late Dr. Currie, of Liverpool, and has certainly been attended with very beneficial effects, probably by conducting heat from the body, and producing a moist skin. When there is a determination of blood to any part of the body, as the head, chest, or bowels, it is a dangerous remedy, at any rate, it is too bold

an experiment for domestic practice. Frequent exhibition of purgative medicines, as the Epsom salt, No. 2, lately recommended by Dr. Hamilton, is attended with no hazard, and is often no less beneficial. When the fever is entirely removed, the strength of the system may be restored by the use of the following mixture :

Take of essential salt of bark, No. 24. one drachm ; dissolve in half a pint of mint water, and add sweet spirit of nitre, No. 15, three drachms.

Three table spoonfuls to be taken four times a day. If the salt of bark cannot be procured, half a pint of the decoction (see *Peruvian Bark*, No. 48,) may be substituted for it and the mint-water.

It must be remembered that fevers of all kinds are involved in too much obscurity to constitute a part of domestic medicine : inflammatory fevers often *suddenly* changing to the low or putrid kind ; when an opposite treatment is required. They are also often *symptomatic* of *local* mischief in the system, the nature of which can only be ascertained by a medical practitioner. They likewise frequently affect one part of the body more than another, and generally such as are most essential to life, as the brain and lungs ; and if those determinations be not duly attended to, and counteracted, these parts will, in the course of a few hours, from the delicacy of their structure, sustain so much injury, as to endanger, if not speedily destroy, the life of the patient.

OF INFLAMMATION OF THE BRAIN.

People in the vigour of life, the passionate, the studious, and such as are predisposed to apoplexy, are most subject to this disorder.

SYMPTOMS.—Like all other fevers, it generally commences with rigors, tremor of the extremities, a sense of lassitude and stupor. The veins of the head soon become distended, and the arteries beat with increased force ; the eyes are often stedfastly fixed, fierce, and sometimes sparkle ; the voice shrill, and language incoherent ; a proneness to anger, and at times a determined resolution to get out of bed ; the pulse is generally languid, the extremities cold ; on dosing the patient generally talks or mutters a great deal, with a chattering of the teeth, trembling of the hands, and almost constant motion of the fingers, which seem employed to pick or gather something, and often do gather the nap of the bed-clothes. After the *fourth* day, the delirium is more continual and furious, with watching, convulsions, and hiccup, white stools, and at length the stools and urine are discharged involuntarily ; the pupils of the eyes dilated, and other symptoms of approaching dissolution ensue ; or critical sweats and looseness come on, or bleeding at the nose, or piles, which are of a more propitious import.

CAUSES.—Excessive drinking, violent passions of the mind, exposure of the head to the sun, long watching, close application of the mind, suppression of natural evacuations, concussions of the brain, and whatever may increase the afflux of blood into the head.

TREATMENT.—The most powerful remedies should be employed, on the *first attack* of the disease, to unload the vessels of the head ; for this purpose as much blood should be extracted as the system will bear, either by opening one or both the temporal arteries, or from the scalp or nape of the neck, by the operation termed cupping ; or from the jugular vein, or the arm, by a *large* orifice, twelve or six-

teen ounces of blood, or till the patient faints, which will prove of much greater advantage than double the quantity extracted from a small vessel, or by leeches. The head should be shaved, and the *whole* of the scalp covered with a blister. The next object is to diminish the determination of blood to the head, by doses of the aperient mixture, No. 62, and the clyster, No. 97. With the same view blisters should be applied to the feet, the thighs, and arms ; or the mustard poultice, No. 111. Folds of cloth, wet with vinegar, may be applied to the forehead, or ice or snow to the scalp. The room should be kept dark and quiet, and the patient supported with barley-water, acidulated with lemon juice. Such is the delicate structure of the seat of the inflammation, that no time should be lost in the employment of these means, which, from the feeble state of the pulse, are too often neglected by timid or inexperienced practitioners, till the brain has sustained irreparable mischief.

The saline mixture may likewise be given every three or four hours, as directed No. 78, page 71, with ten or twelve drops of the tartarised antimony wine, No. 16, to which as many drops of the tincture of foxglove may be added if the circulation be much hurried ; but in inflammatory attacks of a part of such delicate structure, and so essential to life as the brain, the advice of the most skilful and experienced physician or surgeon in the neighbourhood should be resorted to in the earliest stage of the attack*.

* Young Physicians whose practice is generally governed by the state of the pulse, and the effect more than the cause of disease, too often confound this affection with putrid fever, and

The state of the mind should, in this disease, be particularly attended to. The medical writers of antiquity have, with regard to this given many very judicious directions. Aretæus remarks several circumstances, apparently minute, but in reality very important. Thus he advises, “ quiet and calmness both to the sick person and his attendants, and that he should be placed in a chamber of moderate size, with the walls smooth, uniform, and regular, without projections, and not ornamented with variety of colours or paintings, as they are apt to distract the mind and impose on the patient for realities. He orders even the bed-clothes to be smooth and of a regular surface, that the patient may not be induced to fatigue himself by picking the irregularities. He also directs that some of his most intimate friends may have access to him, and by amusing discourse and mild expressions, endeavour to pacify and compose his perturbation of mind. He recommends likewise a compliance, as far as possible, with all the desires of the patient, especially if he be prone to anger and violence. If light be offensive, or seem to aggravate the disorder by suggesting objects to the imagination, he orders the chamber to be kept dark ; but if darkness from the uncertain state of mind it induces, causes dread and horror, light is directed to be let in.” Cælius Aurelianus, a physician of great celebrity in his time, agrees in most of these points with Aretæus, to which he adds some useful cautions of his own. Thus he directs

instead of the depleting plan recommended above, treat the phrenetic symptoms as delirium from debility. The pulse, observes the learned Celsus, *res fallacissima est* ; and in this disease it is particularly so.

the “light to be mild and gentle, as of a lamp or that of the day, let in through a small aperture, and directed principally to the face of the patient, as an object to fix his attention, and thus prevent the mind wandering in uncertain thoughts and ideas ; a precaution frequently useful in modern practice, and known to be of the greatest efficacy in calming delirium when not very violent. He also recommends that such persons should not be admitted to him to whom he bore any aversion or dislike in his natural state of health ; and that those people should be introduced whom he had been accustomed to respect and reverence ; but that the visits of these should be only at intervals, in order that the influence of the mind might not be destroyed by habit and familiarity.” All these precautions are extremely proper, being founded on reason and experience*. These directions, however, more apply to the delirium attendant on fever than *active* inflammation of the brain ; as in the latter instance the patient is for the most part in a state of stupor.

INFLAMMATION OF THE EYE.

SYMPTOMS.—Pain, redness, heat, and tension of the ball of the eye, or its membranes, accompanied with intolerance of light, and generally with an effusion of hot acrid tears.

CAUSES.—External injury, excessive light, minute examinations, repeated intoxication†, intense heat, and ob-

* Falconer’s Dissertation on the Influence of the Passions, page 89.

† Inflammation or redness of the eyes is a distinguishing badge of a drunkard, remarked by the vulgar as if to point him

structed perspiration, are the most frequent causes of this disease.

TREATMENT.—The *repeated* application of leeches to the eye-lids or temples, blisters to the nape of the neck, the occasional use of the aperient mixture, No. 62, the continued application of the eye-water, No. 100, (by means of folds of fine old linen) the saline mixture, No. 78, a dark room, and low diet, are all indispensably necessary in the treatment of this disease, and should be *speedily* employed to prevent opacity of the cornea*, and supuration. If the inflammation continues obstinate, the blister should be kept open by dressings of the savin ointment; and the aperient mixture, application of leeches, &c. should also be repeated; and if the patient be of a plethoric habit of body, the extraction of blood from the jugular vein or arm will also be proper. When the disease occurs periodically, or in a scrofulous habit, the mixture, No. 75, page 70, should be substituted for the saline mixture, after due evacuations by the means above suggested. In case of much pain, two or three drops of liquid laudanum may be dropped within the eye-lids at bed-time, or twice a day, which will not only allay the irritation, but often succeed in speedily dispersing the inflammation, particularly after the operation of the aperient medicine, &c.

out by the finger of scorn. The wise king of Israel, who was evidently well acquainted with human nature, says, "Who hath woe? who hath sorrow? who hath contentions? who hath babbling? who hath wounds without cause? who hath *redness of eyes*? they that tarry long at the wine, they that go to seek mixed wine."—Solomon's Proverbs,

* This effusion, terminating in adhesions of the layers of which the transparent cornea consists, produces opacity, and is a very common cause of blindness.

The electric aura applied to the eyes, is much recommended by Mr. Samuel Cam, an ingenious surgeon in Hereford, in whose practice, at the General Infirmary of that county, it proved very successful. If the inflammation arises from venereal taint, the internal use of mercury will be absolutely necessary.

The fever diet, described page 148, should be strictly observed.

When inflammation of the eye occurs in a scrofulous habit, it is generally of a very obstinate nature, and after the system is quieted by the foregoing means, will likewise require the use of the alterative medicines recommended for correcting scrofula, to complete the cure, particularly the prepared natron, the alterative pills, and compound decoction of sarsaparilla. See Scrofula.

Chronic inflammation of the edges of the eye-lids, will also require the same constitutional remedies, which, with the use of the following ointment, will effect a cure :

Take of ointment of the nitrated quicksilver, two drachms ; olive oil, four drachms.

To be mixed in a glass mortar and applied to the edges of the eye-lids, and particularly within the corners of the eyes, every night and morning, by means of a fine camel-hair pencil. In such cases an issue in the neck or arm, and the scrofulous mixture, No. 75, page 70, will prevent a recurrence.

Infants born in winter are very subject to sore eyes, from the action of the cold air on them ; all that is requisite in such cases, is to keep the head warm, and wash the eyes with fresh rose water. If the inflammation should increase, it will be proper to add two grains of white vitriol to four ounces of rose or elder flower water, which should be

dropped within the eye-lids once or twice a day, and often applied externally by means of some fine lint; the bowels should likewise be emptied by a little magnesia and rhubarb in mint water. When the symptoms run high, the application of leeches to the eye-lids, and sometimes a blister to the nape of the neck, or behind the ears, will be necessary.

Infants are sometimes attacked with sore eyes a few days after birth, attended with a discharge of thick matter, which, if not skilfully treated, may terminate in blindness; and as it is very rapid in its progress, the advice of an experienced surgeon should be taken on its first appearance.

PREVENTION.—People subject to inflammatory attacks of the eyes or eye-lids, should pay particular attention to the state of the digestive organs, and on any symptom of indigestion, should take the alterative cathartic pills, as directed No. 84, or a solution of the Epsom salt, as advised No. 2, especially in the commencement of spring and autumn. The eyes should likewise be washed every morning with *cold* water, to which a little brandy may be added on the appearance of redness or fresh irritation.

High seasoned dishes, strong wines, and spirituous liquors, should be avoided.

OF INFLAMMATION OF THE INTESTINES.

SYMPTOMS.—This disease is distinguished by a *fixed* pain in the belly, which is increased by pressure, attended with the usual symptoms of fever, costiveness, and vomiting. The pain is felt in different parts of the bowels, according to the seat of the inflammation, and very often it spreads over the whole belly, and is felt more especially about the

navel. The pulse is quick, hard, and small; the urine high coloured; the abdominal muscles frequently contracted.

CAUSES.—It may be occasioned by external contusion; by acrids of various kinds taken into the stomach; frequently by very cold drink, swallowed when the body is warm; or cold applied to the lower extremities, or belly itself; it is sometimes produced by costiveness; and often supervenes in the progress of cholic; or is also occasioned by the strangulation of a protruded portion of the intestines in a rupture, or what is commonly termed a broken belly.

TREATMENT.—Copious bleeding, the frequent exhibition of an emollient clyster of starch, fomentations, the warm bath, a large blister on the belly, small anodyne clysters (see No. 96) occasionally injected, are the most effectual remedies in the first stage of this violent disease. If vomiting be an attendant, great care must be taken not to aggravate it either by the *quantity* or *quality* of any thing thrown into the stomach.

Such is the nature of this complaint, that we cannot be too cautious either in administering medicines or diluents by the mouth; for the capacity of the intestinal canal is often so diminished, as to be sometimes nearly obliterated or shut up; and a quantity of any kind of liquid or aliment, however *simple* in themselves, must, by *distending* the intestines, or being forced against the obstruction, necessarily increase the irritation and mischief. The propriety of administering aperient medicines is much to be questioned, as the irritation they produce may aggravate the inflammation; the *frequent* use of emollient clysters will supersede their necessity, and at the same time act as

a fomentation to the parts. Fresh olive oil in the dose of a table spoonful, is, perhaps, the only medicine that can be admitted with safety. Laudanum may, in some cases, be employed with great advantage; but in others it may prove as injurious—clysterwise it is generally more efficacious than when given by the mouth. When the pain remits, and the *violence* of the symptoms abate, *mild* diluents may be allowed, as chicken broth, linseed tea, &c. and if such liquors be retained without aggravating the symptoms, a little fresh castor oil may be given every three or four hours, till it procures a passage.

If that state of the intestine be suspected to exist, technically termed volvulus or intorsusception, that is, a preternatural *ingress* of one portion of the intestine into the other, or a reduplication of the intestine; quicksilver, in the quantity of an ounce, should be given, and as its effects are entirely mechanical, the patient should be put in an erect posture, (that it may the better press on the inverted part) and kept in that state till it has passed the stricture, which will require but a few minutes. He may then be replaced in bed, when the quicksilver will more easily pass through him.

In a late treatise on inflammation of the bowels, by Dr. E. Peart, calomel and opium are ordered in the first and every stage of this disease. The calomel to be continued at short intervals, and opium when requisite, till the disease is removed, even although forty, sixty, or more than one hundred grains of calomel may in the whole be found necessary. I have lately witnessed, in two desperate cases, the salutary effects of this practice.

When the inflammation is the effect of some acrid poison swallowed, it requires the same treatment as already recommended for poisons.

The inner membrane of the stomach and intestines are subject to inflammation similar to that of the cuticle, termed St. Anthony's Fire, which is, therefore, named Erysipelatous, or Erythematic Inflammation of the Intestines. In this species calomel, as recommended by Dr. Peart, is a very excellent remedy. Stimulants, as a weak infusion of ginger, has likewise proved very efficacious, by producing a secretion of mucus, in which the disease seems to terminate. Medicines of this class should not, however, be employed without the sanction of an *experienced* practitioner. Children are particularly subject to this species of inflammation of the intestines, and in them it often proves fatal. The warm bath, small doses of calomel, and the cretaceous mixture, No. 64, with a diet of animal and vegetable jellies, as the hartshorn, isinglass, arrow-root, &c. are, in such cases, principally to be depended on.

DISTINCTION.—The great degree of fever, quickness of the pulse, *constant* pain and great heat, will distinguish this disease from every species of colic, in which vomiting is likewise not in so great a degree, and is at the same time attended with coldness of the extremities.

INFLAMMATION OF THE THROAT.

This disease also called Quinsey, occurs principally in spring and autumn, when vicissitudes of heat and cold are frequent. It affects especially the young and sanguine, and a disposition to it is often acquired by frequent attacks.

SYMPTOMS.—It commences with an unusual sense of tightness in the throat, particularly on swallowing, which is often effected with difficulty and pain. On inspection, some tumefaction and redness of the fauces may be perceived, which shortly spreads over the tonsils, the uvula,

and soft palate, attended with a troublesome clamminess of the mouth, and fever, with its usual attendants, as head-ach, delirium, &c. In desperate cases, the tongue and tonsils are so much swollen as to prevent deglutition, and even so to affect respiration, that the patient is often obliged to be supported in an erect posture, to prevent suffocation. The inflammation generally attacks one tonsil first, which in a day or two it sometimes leaves and affects the other, and not unfrequently quits them both suddenly, and flies to the lungs.

CAUSES.—It is generally occasioned by the external application of cold air, particularly about the neck. Whatever violently stimulates the fauces, in a plethoric habit especially, as acrid food, poisons, &c. may produce it.

TREATMENT.—As the inflammation soon advances to suppuration, *active* means should be *speedily* employed for its resolution. For this purpose the patient should take a *full* dose of the Epsom or Rochelle salt, No. 2, or the aperient mixture, No. 62, Page 67; and after its operation, the saline mixture, No. 78, with twenty drops of antimonial wine at bed-time. The gargle, No. 92, or 93, Page 74, should be used frequently, and the volatile liniment, No. 103, Page 77, applied *externally*, which for *slight* cases will generally prove sufficient; but if the inflammation should so increase as to give a sensation of suffocation, the extraction of blood near the part by leeches, or from the jugular vein, and a blister under the chin, to reach nearly from one ear to the other, will also be necessary.

The diet should consist of gruel, arrow-root, and barley-water, acidulated with lemon-juice.

If, notwithstanding these means, the inflammation advance to maturation, the gargle, aperient, and saline medicines should be discontinued, and the patient allowed a little wine and beef-tea, till he is able to swallow more substantial food; and after the matter is evacuated, the detergent gargle, No. 95, should be employed, and three table-spoonfuls of the following mixture taken three or four times a day:

Take of red rose leaves dried, two drachms; infuse in half a pint of boiling water till cold, then strain and add diluted vitriolic acid, two drachms; compound tincture of rhatany root or Peruvian bark, half an ounce. Mix.

If the patient should, at any period of the disease, be incapable of taking any food by the mouth, a clyster of starch or broth, see No. 99, Page 76, should be administered three or four times a day, for the purpose of throwing nourishment into the system.

OF INFLAMMATION OF THE LUNGS.

SYMPTOMS.—This disease commonly commences with shiverings, which are soon succeeded by difficulty of breathing, cough, pain or stitches in the chest, particularly on inspiration or coughing; a sense of fullness in, and tightness across the chest; great anxiety about the heart; restlessness; loss of appetite; the pulse quick; sometimes hard, and seldom strong or *regularly* full; the breath hot, the tongue covered with a yellowish mucus, and the urine turbid. The difficulty of breathing is most considerable on inspiration and in a horizontal position; and in order to facilitate respiration, the shoulders and head are kept more or less elevated. In consequence of the obstruction to the free passage of blood through the lungs, the veins

of the neck are distended, and the face swollen, with a dark red colour about the eyes and cheeks. The pain in the chest is generally aggravated by lying on the side affected, though sometimes the contrary happens, and very often the patient can lie easy only on the back.

CAUSES.—It is occasioned by the application of cold to the body, obstructing the natural perspiration of the skin, and thus producing a determination to the lungs, while, at the same time, the lungs themselves are exposed to the action of cold air. Suppressed evacuations, repulsion of eruptions, violent exercise, external injuries, and vehement exertions of the lungs, are often *exciting* causes of this disease.

TREATMENT.—The principal object in the treatment of this disease, is to unload the vessels of the lungs; by bleeding, and such remedies as are calculated to produce a determination of blood to the surface of the body and extremities, which, on account of the importance and delicacy of structure of the seat of the inflammation, should be employed as *early* and *fully* as possible.

With these views twelve or sixteen ounces of blood should be taken, by a *large* orifice, from the arm, and repeated according to the strength of the patient and the violence of the symptoms*; a large blister should be applied to the side most affected, and if the patient should complain of pain in the head, pulsation, or drowsiness, one should likewise be applied to the nape of the neck, and

* If the constitution of the patient be naturally weak, the extraction of blood from the chest, by leeches or cupping, will often prove more serviceable than *general* bleeding, particularly the latter.

even to the feet. A dose of the aperient mixture, No. 62, should be taken every two hours, till it operates, and afterwards the cough mixture, No. 66, according to the directions there specified; ten drops of the tincture of foxglove may likewise be given two or three times a day if the pulse should continue quick. The patient should be suffered to drink plentifully of the almond emulsion, (see page 94) or an infusion of linseed, acidulated with lemon juice, which will be sufficient for his support till the symptoms are considerably abated, when he may be allowed a little arrow-root or tapioca jelly. After the inflammatory symptoms have subsided, the decoction of the Iceland liverwort, will prove an excellent restorative. See No. 117, page 81.

The structure of the lungs is of that delicate nature, that it will not sustain inflammation many hours without endangering the life of the patient, or laying the basis of consumption, particularly if the patient be of a scrofulous habit. The active remedies recommended above should therefore be employed as *speedily* as possible, in order to abate and disperse the inflammation; and not by degrees, as is too frequently the practice with timid or inexperienced practitioners. Through an indecisive practice many lives are doubtless lost, that might have been saved had the means been adopted in the first instance.

It is scarcely necessary to observe, that in case of inflammation of a part so essential to life as the lungs, the most able advice should be resorted to in the first instance, as the delay of a few hours might render the recovery of the patient very doubtful.

OF THE ITCH.

SYMPTOMS.—This eruption usually appears about the wrist, fingers, arms, and thighs, but seldom on the head. The itching is much aggravated by warmth, particularly in an evening, and when in bed.

CAUSE.—By microscopical examination it appears that this eruption is produced by animalculæ, which are described to be of a whitish colour, and shaped like a tortoise, having six feet, and a sharp head, with two sharp horns on its points, of a hard formation, so as not to be destroyed by friction or pressure; others who have not taken the trouble of making so minute an examination, assert, that it arises from an ichorous serum, which, by irritating the small ramifications of the nerves under the cuticle, occasions the itching and heat. If this latter opinion be correct, it must be difficult to account how it can be communicated by contact.

CURE.—Sulphur is a certain remedy for this disease, and more safe and expeditious than any other application we are acquainted with. In the itch ointment, No. 107, page 78, the unpleasant smell of this medicine is disguised. The part affected should be well anointed with it every night, till the eruption entirely disappears. The internal use of sulphur will, in all cases, assist its external application. The linen should be clean and often changed, and not worn again before it be well washed and bleached, so as to destroy the animalculæ or infection that may have lodged in it.

The decoction of white hellebore, is by some preferred to sulphureous preparations, on account of being free from

any unpleasant smell. It may be made in the following manner :

Take of white hellebore root, bruised, four ounces ; boil in a quart of water to a pint and a half, then strain, and add lavender water, four ounces—

with which the parts affected should be washed two or three times a day.

Mercurial applications are much used, and preferred by many eminent practitioners ; but they are neither so safe or certain as sulphur, and may, under certain circumstances, prove very hurtful to the constitution. The advertised remedies for the itch are chiefly composed of arsenic, mercury, and lead.

OF JAUNDICE.

SYMPTOMS.—This disease comes on with listlessness, loss of appetite, drowsiness, oppression of spirit, and generally costiveness, which are soon succeeded by a yellow appearance of the whites of the eyes, the nails of the fingers, and at length the whole surface of the body ; the urine is high-coloured, and deposits a yellow sediment, which imparts its colour to linen ; the stools are whitish or grey ; a violent pain frequently extends from the right side to the pit of the stomach, which is considerably aggravated after meals ; some are much disposed to sleep, and others to watchfulness. After the disease has existed a few days, the whole of the secretions, the brain, and bones become tinged with the colouring matter of the bile.

CAUSES.—This disease is occasioned by the passage of the bile being obstructed by biliary concretions lodged in the duct, or by compression of schirrous affections of the

viscera*, or an impregnated womb, or spasmodic contraction† of the biliary duct itself, without such mechanical causes. A redundancy of bile in the alimentary canal is sometimes, but very rarely, a cause of this disease (see *Bilious Complaints*) ; a sedentary life and dejection of spirits dispose the body to this disorder.

TREATMENT.—The cure of this disease depends on the removal of the impediment to the free passage of the bile through the biliary duct ; but before the accomplishment of this object is attempted, it is often necessary to palliate the most distressing symptoms. Thus, if the patient be affected with a violent paroxysm of pain, we should endeavour to procure a suspension or mitigation, by the exhibition of twenty drops of liquid laudanum in a little peppermint water, which should be repeated according to the urgency of the pain. The deficiency of bile in the alimentary canal, may in some measure be supplied by taking three table spoonfuls of the following mixture an hour before each meal :

Take of infusion of Columbo, six ounces ; salt of wormwood, two scruples ; aloetic wine, one ounce. Mix.

* Schirrous enlargements of the viscera are generally the consequence of the abuse of spirituous or fermented liquors ; drunkenness has therefore been enumerated as one cause of this disease. “ When jaundice appears,” says a modern author, “ it may be reckoned a proof of the patient’s being a veteran worshipper at the shrine of Bacchus. The drunkard should be taught to look into a glass, that he might spy the changes in his countenance. The first stage would present him with redness of eyes, the second will exhibit the carbuncled nose, and the third a yellow and black jaundice.”

† It is remarkable, that this cause is often produced by jealousy and anger. Hoffman and Morgagni relate instances of the jaundice being repeatedly produced by mental commotions.

When the obstruction is produced by spasms or biliary concretions, and the patient is of a plethoric habit, the loss of blood from the arm, by relaxing the parts, will afford considerable relief.

When it arises from concretions lodged in the biliary duct, the indication of cure is, to produce a dissolution of the concretion, or to facilitate its passage to the intestines, by relaxing and agitating means. The solution of biliary concretions is extremely difficult, even out of the body, and of course must be much more so when lodged in the gall bladder, or duct. Dr. John Camplin asserts, that he has found ether to answer this purpose, and I have certainly witnessed its good effects in several cases; but whether from a solvent power, as the Doctor supposes, or as an anti-spasmodic, I cannot take upon me to determine: the latter is the most probable.

For the purpose of relaxing the biliary duct, laudanum, the loss of blood, the warm bath, and nauseating doses of the tartarised antimony wine, No. 16, are the most powerful remedies; and the agitation of the parts, which will afterward accelerate its expulsion into the intestines, is best effected by the emetic powder, No. 88, active purgatives of calomel and jalap, and exercise. During the employment of these means, the want of the bile in the alimentary canal should be supplied, by the use of the mixture of Columbo, recommended above.

When the disease is produced by the *pressure* of a schirrous tumour*, the remedies to be depended on are the

* Schirrosity of the pancreas, by compressing the biliary duct, is not an unfrequent cause of jaundice.

hemlock combined with mercury, in the following proportion, and the use of distilled water, as recommended for the cure of cancer :

Take of powdered hemlock, one drachm ; prepared calomel, two scruples ; conserve of hips, sufficient quantity to form a mass ; to be divided into forty pills.

One to be taken three times a day, with a dose of the alkaline mixture of Columbo, already recommended.

The diet should be regulated according to the constitution of the patient ; in cases of organic disease, the strength should be supported ; but if it be produced by biliary concretions, the diet should be low, particularly if the patient be plethoric or feverish. But as vegetables are apt to generate a troublesome degree of flatulence and acidity in the stomach, the patient should be allowed broth, and a little animal food in substance. If it arises from a redundancy of bile in the alimentary canal, which is very rarely the case, gentle laxative medicines, as rhubarb, castor oil, and lenitive electuary will be sufficient.

Infants soon after birth, are very subject to attacks of jaundice, from viscid mucus obstructing the gall duct, for the removal of which, a gentle emetic of ipecacuan powder (about three or four grains), is generally sufficient ; if it should yield to this remedy, a gentle dose of calomel and rhubarb may be given twice a week, and the solution of salt of wormwood two or three times a day, as directed No. 21, page 27.

People subject to this disease from gall-stones, should be very particular in avoiding indigestion, and the consequent formation of acidity, which, from the analysis of the stone, is probably the primary cause. See *Prevention of Indigestion*.

OF KING'S EVIL, OR SCROFULA.

The Latins termed this disease scrofula, from *scrofa*, a hog, because it has been observed in the swine. It is named the King's Evil, in consequence of Edward the Confessor, and other succeeding kings, both of England* and France, pretending to cure it by the touch. This disease is evidently hereditary, although it often lies dormant for two or three generations.

SYMPTOMS.—This disease appears from two years of age, and generally, but not always, ceases at the period of puberty. It is for the most part attended with dilated pupils of the eyes, an open countenance, and thickness of the upper lip ; indeed the countenance of a scrofulous habit is generally so peculiarly marked, that a medical practitioner may in general be enabled to determine by it whether the constitution be tainted or not. Light hair, rosy complexion, smooth, soft, and fair skin ; fulness of the upper lip with a chap in the middle ; light blue eyes, with dilated pupils, chiefly characterize the scrofulous countenance.

The first *external* symptom is, hard and indolent enlargement of the glands in the neck, behind the ears, and sometimes in the arm-pits and other parts of the body ; in process of time the ligaments of the joints and even the bones become affected, so as to form the disease termed white swelling. The *internal* symptoms are, a tumefaction of the glands of the mesentery, and a deposition of

* The last that practised this delusion was Queen Ann. In the London Gazette of the year 1707, is inserted a proclamation, inviting her scrofulous subjects to the royal touch.

matter in the substance of the lungs, forming what are termed tubercles.

CAUSES.—Both the nature and cause of this disease are but little understood. Crude indigestible food, bad water, living in a low damp situation, are noticed by authors as *exciting* causes. Debility, induced by it, is by some authors, mentioned as capable of producing it ; but this is certainly the *effect*, and not a cause of the disease, and is chiefly a consequence of tumefaction of the mesentery glands, by preventing the chyle from being conveyed to the blood for the due support of the body : weakness, however, often puts the disease into action.

We are much in the dark respecting the nature of scrofula. It often attacks children, who are apparently in a state of health, the robust and the debilitated being equally subject to it. Indeed the disease appears in such different forms, according to the part of the body it attacks, that the name should be employed to comprehend a class diseases.

TREATMENT.—Numerous alterative medicines have been recommended as specifics for this disease ; but they have not stood the test of experience. The prepared natron, as directed No. 60, I have found very beneficial combined with the rhatany root, or Peruvian bark (in the proportion recommended in the mixture for scrofula, No. 75, page 70). If the general health has suffered much, and the patient be free from cough, moderate exercise and cold bathing, particularly in sea water, will prove powerful auxiliaries.

The muriate of lime is also a powerful corrector of scrofula. I have lately met with several very desperate cases, in which it has proved highly beneficial. It may be taken

with the decoction of rhatany root, in the following proportion :

Take of muriate of lime, three drachms ; decoction of rhatany root, ten ounces ; compound tincture of cardamom seeds, one ounce ; mix. From two to three table spoonfuls to be taken three times a day.

A saturated solution of muriate of barytes in the dose of four to six drops twice a day, in any convenient vehicle, is particularly recommended in scrofulous complaints by Dr. Crawford, and it appears by his account, that it has been productive of salutary effects in a few instances. It sometimes occasions distressing symptoms, on which account the Doctor very properly cautions those who are *unskilful* in medicine, not to tamper with it. From some late accounts it appears, that this medicine has been given with advantage by some practitioners in Germany, and particularly by Dr. Hufelhand, physician to the Duke of Saxe Weimar. Prior to its exhibition, the state of the digestive organs should be improved by an emetic, and the use of the scrofulous mixture, No. 75 ; for if the digestion be not good, the medicine may be decomposed, and its peculiar medicinal virtues destroyed. From inattention to this circumstance, the failure of such preparations may probably be attributed. During its use, the prepared natron, or any other *alkaline* medicine, is improper.

The decoction of coltsfoot is much recommended by Dr. Cullen, as a corrector of scrofula ; the recent expressed juice of the leaves I have known prove very beneficial, in the dose of two table spoonfuls two or three times a day.

The compound decoction of sarsaparilla, which is very similar to the *Lisbon diet drink*, is much extolled by many eminent surgeons, for its anti-scrofulous properties. The following are the directions for making it :

Take of sarsaparilla root; sliced and bruised, six ounces; sassafras bark, bruised; shavings of guaiac wood; liquorice root sliced; of each one ounce; mezereon root bruised, three drachms; distilled water, five quarts.

These articles are to be *gently* boiled over a slow fire for five or six hours, and the liquor afterward reduced by boiling, to five pints. The mezereon root should not be added till the latter part of the process. The quantity to be taken is from twelve to sixteen ounces (a pint) in twenty-four hours.

The most eminent practitioners generally recommend alterative doses of antimony and mercury to accompany the use of this decoction, particularly in obstinate cases; which are certainly powerful auxiliaries. The following is a safe, and the best form for their exhibition:

Take of prepared calomel, six grains; golden sulphur of antimony, twelve grains; conserve of hips, sufficient to form a mass,

To be divided into nine pills; one of which should be taken every night.

These pills need not be persisted in more than a week or ten days, or longer than the above quantity lasts; as the long continued use of mercury, by debilitating the system, will tend more to aggravate scrofula than otherwise. The decoction of sarsaparilla should, however, be persevered in till the symptoms have disappeared.

If acidity should prevail in the stomach, notwithstanding the use of these medicines, the prepared natron should likewise be taken occasionally, as directed, No. 60. Costiveness should in all cases be avoided, by the occasional use of the solution of Epsom salt (see No. 2). During the use of mercury cold bathing is improper.

An issue in the arm, by quieting the system, prevents the inroads of the disease on the constitution, more than any other remedy. I have known it to suspend the disease, till it appears to have been worn out in the system. Parents often object to an issue, on the supposition that the discharge will tend to weaken the patient; so far from this being the case, I have uniformly found issues in scrofulous subjects to improve the general health, and even to promote digestion.

The local affections existing in different parts of the body generally require, with the use of internal medicines, much management, according to circumstances: thus, when a joint is affected, the formation of matter should be prevented, by the treatment recommended for white swellings; and when the lungs are affected with tubercles, the remedies recommended for scrofulous consumption will be necessary. When the glands of the neck are much tumefied, the topical application of sea water, or the following lotion, will prove very beneficial:

Take of crude sal ammoniac, half an ounce; muriatic acid, three drachms; pure water, one quart.

To be applied by means of a folded piece of linen, or the parts frequently washed with it: and if from their magnitude they are attended with inconvenience, the following pills may be taken for ten days, with the mixture of rhatany root and muriate of lime already noticed:

Take of extract of cicuta, one drachm; prepared calomel, fifteen grains.

Mix, and divide into twenty pills—one to be taken twice a day.

If the part be attended with pain and inflammation, the application of leeches, a blister, or an issue, is necessary to

prevent suppuration, which in all scrofulous tumours should be attempted, for such ulcers are not only difficult to heal, but always leave an ugly scar.

Solutions of corrosive sublimate and arsenic have been industriously advertised as specifics for scrofula. Such medicines, judiciously administered, may prove beneficial; but in the hands of ignorance, they must, from their poisonous qualities, be often productive of serious mischief; for if the dose be exceeded only a few drops, the patient's life may be destroyed; instances of which have certainly occurred; the proprietor's positive declaration that they are perfectly innocent having induced many to exceed the directions in order to accelerate their recovery.

People of scrofulous habits should avoid all kinds of excesses, and particularly guard against indigestion, for nothing is more likely to put the disease into action than a disordered state of the digestive organs, and the consequent formation of acidity in the stomach. The rules already given for the prevention of indigestion should therefore be strictly attended to by scrofulous subjects; which will suspend the disease and keep it in a dormant state for life, however strong the predisposition. Diseases of every kind in scrofulous habits should also be particularly attended to on their onset; for however trifling they may appear to be, they often act as *exciting* causes of scrofula, or become combined with it. Thus cough, or a slight catarrhal affection, with determination to the lungs, may occasion that deposition of matter in the substance of the lungs, which lays the foundation of an obstinate species of pulmonary consumption. Rheumatic affections of joints, and sprains, in a scrofulous constitution, if neglected, may terminate in white swelling; indeed, the symptoms of all

diseases generally run higher in scrofulous subjects than any others ; acute complaints proving more fatal, and chronic ones more obstinate. In females, particularly, it is some time before the health of the constitution is established, and the period of puberty with these is to be considered the most critical of their lives.

It has been observed by many medical authors, that scrofulous people should never marry. The disease, however, more generally appears in the third or fourth generation than in the offspring of such parents : besides, I believe very few families in this kingdom are to be found entirely exempt from it, and it frequently happens that those who have not the least appearance of scrofula, or been able to trace it in their families, have the most scrofulous children ; who, from such circumstances, will not allow that the disease is scrofulous : and medical practitioners, in general, conceal the nature of the disease, sooner than run the risk of incurring the displeasure of their employers.

So far from discouraging such young women from entering the matrimonial state, I would advise them to marry early in life, from a conviction that nothing is more likely to establish the health of the body, and counteract or destroy scrofula, than the process of breeding ; as it generally happens that all its symptoms disappear after pregnancy.

A diet principally composed of vegetables, a beverage of distilled water, and avoiding costiveness (by the occasional use of the solution of Epsom salts, as directed No. 2.) the mixture No. 75, page 70, will prove more powerful in suspending or destroying scrofula, than the most potent medicines.

OF LEPROSY.

The true lepra, or leprosy, very rarely occurs in this country. To this head, however, is referred a great variety of cutaneous affections, which, for the most part, yield to the remedies recommended for cutaneous foulness. See *Eruptions of the Skin*.

OF LUMBAGO.

When rheumatism attacks the loins, it is thus termed. In cases of pains in the loins, medical advice should always be taken, for should inflammation be here mistaken for rheumatism, and, as such, treated by *stimulating* medicines, the consequence would be a formation of matter, constituting the disease termed *Lumbar Abscess*, which generally terminates in the death of the patient. Adversed medicines for lumbago have certainly been productive of much mischief in this respect.

When the case is doubtful, the warm bath, a blister over the part, and the antimonial powder, as directed No. 37, may be considered safe, and generally prove efficacious. Lumbago requires the same general remedies and topical applications as recommended for rheumatism.

OF MEASLES.

This disease is highly infectious, and like the small-pox, the constitution that has been once under its influence is not liable to a second attack—a circumstance extremely difficult to account for. It prevails most in spring.

SYMPTOMS.—It generally begins with shiverings, suc-

ceeded by heat ; a severe head-ach in adults, and heaviness in children ; a slight inflammation and considerable heat in the eyes, attended with swelling of the eye-lids, a defluxion of acrid tears, an inability to bear the light, frequent sneezing and discharge from the nostrils ; sooner or later a fever comes on, with a cough, a sense of tightness across the chest, nausea and vomiting. About the fourth, and sometimes the fifth day, red spots, resembling flea-bites, begin to appear on the forehead, and other parts of the face, and successively on the lower parts of the body, which increase, run together, and form large red spots of different figures. The spots on the face sometimes appear a little prominent to the touch ; but, on other parts, do not rise higher than the surface of the skin. On the third day of the eruption, the vivid redness is changed to a brownish red, and in a day or two more, entirely disappears, and is succeeded by a mealy scaling of the scarf-skin, and sometimes a difficulty of breathing, dry cough, pains in the chest, and fever ; which, in scrofulous habits, often terminate in consumption.

CAUSE.—The measles are occasioned by a specific contagion, the nature of which is not understood.

TREATMENT.—If the symptoms be mild, the occasional use of the aperient mixture, No. 62, page 67, and ten or fifteen drops of tartarised antimony wine at bed-time, a low diet, and a warm room, will be sufficient. If the fever and affection of the lungs be considerable, the loss of blood, a blister over the breast-bone, and the cough mixture, No. 66, page 68, will likewise be absolutely necessary, and should not be delayed. The almond emulsion, linseed tea, or the compound barley water, as directed page 94, should be taken freely. If, after these

means, the cough, difficulty of breathing, and pain in the chest should continue, it will be adviseable to apply another blister between the shoulders, or two or three leeches to each side of the chest. If looseness supervene, it should not be checked, unless it be violent, and even in that case not suddenly. Five grains of rhubarb, with two of ipecacuan powder, will in general, for this purpose, be sufficient. After the spots have disappeared, the patient should not be too hastily exposed to a cold air.

The diet should be low in proportion to the degree of fever. The almond emulsion or compound barley-water and vegetable jellies, as arrow-root, tapioca, sago, &c. will in general be sufficient, till the feverish symptoms have greatly abated.

When the measles recede, blisters to the chest, the warm bath, and gentle emetics of ipecacuan powder, are the most powerful remedies that can be employed for its re-expulsion: but such cases being always attended with imminent danger, the *timely* advice of a practitioner in medicine should not be neglected.

If much debility of the system should come on towards the end of the disease, and particularly if purple or black spots appear, the strength of the patient should be supported with cordials, beef-tea, and animal jellies, in order to assist nature in effecting a favourable termination. With this view the rhatany root or Peruvian bark will also be proper, which may be given in the following form:

Take of infusion of the rhatany root, or the decoction of bark, six ounces; extract of liquorice, one drachm; diluted vitriolic acid, two drachms; compound tincture of rhatany root, half an ounce. Mix.

From a dessert to two table spoonfuls to be taken three or four times a day, according to the age of the patient

and urgency of symptoms. Yeast, on account of the quantity of fixed air it contains, has been employed in this case, for the purpose of counteracting a supposed tendency to putrescence in the system. In some instances it has been administered with success, in the dose of a dessert or table spoonful four times a day; but in the majority of cases I believe it has proved hurtful by bringing on purging. If such an effect should follow its use, two or three drops of laudanum may be given with each dose. If the patient should be afflicted with violent purging, it should either be checked or moderated by the cretaceous mixture, No. 64, page 68. The propriety of restraining purging, must, in a great measure, depend on the appearance of the fæces, for if they be dark and offensive, and the strength of the patient not reduced by them, they may be considered of a critical nature, and should rather be encouraged than diminished; but to determine a point on which the life of the patient probably depends, the opinion of the most experienced practitioner in the neighbourhood should be resorted to.

After the termination of the disease, there is frequently an inflammatory disposition remaining, which should be removed by gentle doses of the basilic powder, as directed No. 36. If cough should notwithstanding come on, blisters to chest, and the cough mixture, No. 66, will also be necessary.

Attempts have been made to communicate the measles by inoculation; but I do not believe it ever succeeded, nor could any great advantage result from the practice.

DISTINCTION.—On the *first* attack of measles it is often difficult to distinguish it from common catarrh; in a day or two, however, the violence of the symptoms evince

the nature of the disease. It may be distinguished from other eruptions by the *cough, watering of the eyes, sneezing, hoarseness, difficulty of breathing, and drowsiness*, that precede the eruption.

OF MELANCHOLY.

Melancholy is a *partial* insanity, so nearly allied to that diseased state of imagination termed the hypochondriac affection, as to require a similar mode of treatment. Indeed, it is very difficult in all cases to distinguish the hypochondriac affection from melancholy, the same temperament being common to both. The distinction may be generally ascertained in the following manner : the hypochondriac affection is generally attended with symptoms of indigestion, and though there be at the same time an anxious melancholic fear arising from the feeling of these symptoms, yet while this fear is only a mistaken judgment, with respect to the state of the person's own health, and to the danger to be from thence apprehended, the disease may still be considered hypochondriac affection, and distinct from proper melancholy ; but when an *anxious fear* and *despondency* arise from mistaken judgment, with respect to *other* circumstances than those of health, and more especially when the person is at the same time *without any symptom of indigestion*, it constitutes the disease strictly named melancholy ; but as a true melancholic temperament *may* induce a torpor and indolence in the action of the stomach, so it generally produces some symptoms of indigestion, and hence there may be some difficulty in distinguishing such a case from the hypochondriac affection. When the characters of the temperament are strongly marked, and more particularly when the false

imagination turns upon other subjects than that of health, or when though relative to the person's own body, it is of a *groundless* and *absurd* kind, then, notwithstanding the appearance of some symptoms of indigestion, the case is still to be considered as that of melancholy rather than the hypochondriac affection; these distinctions, however, bear no reference to any difference of treatment.

The distinguishing character of this disorder, is an attachment of the mind to *one* object, concerning which the reason is defective, and perfect with regard to other subjects. It is therefore obvious, like the hypochondriac affection, there is great scope for the management of the mind and passions. The chief point seems to be, to interrupt the attention of the mind to its *accustomed* object, and to introduce *variety* of matter upon which it may exercise itself. This, however, requires the greatest caution and delicacy in the execution. Most melancholic persons are jealous of being esteemed as such, and have generally a great opinion of their own wisdom and sagacity, and of course are apt to hold very cheap the common amusements of life, especially those connected with social intercourse and company, as they are inclined to think themselves neglected and despised by the world.

Van Swieten recommends travelling as best calculated for the cure of such patients, by introducing a gradual yet interesting variety of objects and subjects of attention, which are the more pleasing as they have not the appearance of being *intentional*. The purpose of travelling also (to those whose situation and circumstances admit of it), may be varied according to the disposition of the patient. This esteemed author relates, from his own knowledge, that several literary persons who were thus affected, would

by no means be persuaded to go to any mineral waters for relief, which they thought would confirm the opinion of the world concerning their disorder, but were easily induced to travel for the purpose of viewing several libraries and resorts of learned persons ; and the varieties of attention thereby produced, had the best effects in working a cure. He also recommends to endeavour to excite such passions as are of an *opposite* nature to those that have prevailed during the course of the disorder. Thus the timid are to be supported with such arguments and discourse as may tend to rouse the courage and resolution ; the gloomy are to be cheered with merriment and pleasure ; and the violent and passionate to be restrained by fear. Even shame, observes Dr. Falconer, may be sometimes used successfully in preventing the consequences at least of melancholy. Plutarch relates, that the virgins of Miletus were seized with an epidemic madness, that prompted them to destroy themselves ; which was in vain attempted to be prevented, until it was ordered that the bodies of those who thus put an end to their lives should be dragged naked through the streets : shame here proved a more powerful motive than the sense of duty, or any of the social affections.

It is generally found conducive to the cure not to contradict *too peremptorily* the ideas and opinions of the patient. Opposition, if *too direct*, serves only to irritate the temper, and to confirm erroneous opinions. Such a degree of compliance as expresses only a *moderate* assent often succeeds. When the imagination is not inflamed by opposition, it often corrects itself. Sometimes, indeed, when the senses are *violently* depraved, it may be necessary to feign a more entire acquiescence with the opinion

of the melancholy person. The introduction of sports and amusements, and such employments as consist of moderate exercise of the faculties, are likewise proper. (See treatment of the *Hypochondriac Passion*.) Cælius Arelianus recommends for this purpose, that *literary* people should be amused with *philosophical* questions. That the *farmer* should be entertained with discourses on *agriculture*, and the *sailor* with *naval* affairs. Others, he says, may divert themselves with games of chance. Music, for those who have a taste and ear for it, may perhaps be a powerful remedy, and as such is mentioned by Celsus and other writers.

The observations made on the salutary influence of the true Christian religion on the mind, under the treatment of *Hypochondriasis*, equally apply to melancholy.

OF MENSTRUATION.

Menstruation is a natural secretion of a blood-like appearance, from the womb, so named from its occurring once in the course of a month. This periodical discharge appears to be for the purpose of keeping up sanguification, or the making of blood, and a determination thereof to the womb, for gestation, or the nourishment of the foetus during pregnancy.

In consequence of its not appearing at a proper period of life, irregularity after it has taken place, and too great a secretion, termed flooding, and at the time of its cessation, many derangements of the system are produced, all of which I shall consider under this head.

The interruption of the menstrual secretion* may be considered of two kinds—the one when it does not begin to flow at that period of life in which it usually appears, which is termed *chlorosis*, or green sickness—and the other after it has repeatedly taken place for some time, it does, from other causes than conception, cease to return at the usual periods, which I shall consider under the head of *Suppression of the Menses*: And first,

Of the Chlorosis, or Green Sickness.

The period of menstruation is so different in different constitutions, that no time can be *precisely* assigned as proper to the sex in general. In this country it usually appears about the age of fifteen, but in many more early, and in others not till eighteen, without any disorder being thereby occasioned. It is therefore only to be considered as a *disease* when some *disorders* arise in the body, which may be imputed to its retention, and which are known from experience to be removed by the flowing of the menses. These disorders are a sluggishness and frequent

* Ladies are often at a loss how to express themselves when they have occasion to speak of the state of this secretion: the usual term of *regular*, I believe, is often misunderstood both by the medical practitioner and patient, as equally applying to the state of the bowels as to this periodical evacuation. The term *menstruate* is much more explicit, and could not be mistaken by either. Instead, therefore, of the question, Are you regular? the physician may enquire whether she menstruates regularly? or the lady may observe, that she does not menstruate regularly, or that menstruation is either irregular as to its periods, or too, or not sufficiently abundant. In the treatment of most disorders it is of importance that the medical attendant should be acquainted with the least irregularities.

sense of lassitude and debility, and the various symptoms of indigestion, and sometimes a preternatural appetite, as the longing for chalk, lime, charcoal, &c. The face loses its vivid colour, and becomes of a yellowish hue, the skin pale and flaccid, and the feet, and sometimes great part of the body, affected with an œdematous swelling. The breathing is hurried by any quick or laborious motion of the body, and sometimes occasions palpitation and fainting. A head-ach often occurs, but more certainly pains in the back, loins, and haunches.

CAUSES.—It is supposed to arise from want of due force in the action of the arteries of the womb, or some preternatural resistance in their extremities.

TREATMENT.—The strength of the system should be restored by exercise, and in the beginning of the disease, by cold bathing*, and the use of stomachics, combined with such medicines that are known to produce a determination to the womb, and remove glandular obstructions, as the following pills :

Take of the ecphratic pill of the Edinburgh pharmacopœia, two drachms ; oil of caraway seeds, six drops ; prepared calomel, ten grains. Mix well together, and divide into thirty pills : two to be taken twice a day,

The dose should be increased, diminished, or repeated, so as to produce not less than one, or more than two motions in twenty-four hours. If the smallest dose exceed this operation, they should be only used as an *occasional* aperient medicine, to obviate costiveness, and three table

* If there be a preternatural determination of blood to the head or lungs, or the patient be affected with cough, cold bathing is improper.

spoonfuls of the following mixture taken three times a day :

Take of gum myrrh, prepared natron, of each one drachm; salt of steel, one scruple; mint water, eight ounces. Mix.

Powdered madder root has been much recommended as a remedy for green-sickness, by Professor Home, of Edinburgh, who directs half a drachm of the fresh powder to be taken three or four times a day; after two days the learned Doctor observes, two scruples may be given, and if this dose should not prove effectual in two or three days, it may be increased to a drachm four or five times a day. It appears, that out of nineteen cases, the Doctor cured fourteen by the use of this root. Dr. Cullen, however, states, that in all the trials he made with it, it failed, and in the practice of others it has been attended with no better effect. From the bulk of the dose necessary to be taken, I have never met with a patient who could persevere properly in its use. The extract, which contains a full dose of the virtues of the root in small bulk, is exempt from this objection; it may be taken combined with steel, as the following mixture :

Take of extract of madder, two drachms; muriated tincture of steel, forty drops; bitter tincture, two drachms; mint water, eight ounces. Mix. Three table-spoonfuls to be taken three times a day.

The tincture of black hellebore root, in the dose of a tea-spoonful twice a day (in a wine-glassful of water), is much extolled as a remedy for this disorder by Dr. Mead; it has not, however, succeeded so well in the practice of others. Dr. Cullen asserts, that in many trials he never found it to answer. In fact, there is no medicine that possesses *specific* powers in producing menstruation, and therefore the disease is only to be cured by a combination of

means, the success of which principally depends on improving the general health of the body, as the ecphratic pill recommended above.

Electricity has been employed as a local stimulus in those cases, and a gentle shock passed through the region of the womb, has in a number of instances succeeded.

Frequent and habitual exercise of the body is of the highest importance. It is absolutely necessary to surmount the antipathy which such patients have to an active life. The inclination to indolence is doubtless a symptom of the disease, therefore circumstances are to be proposed to them, which will induce them *willingly* to take exercise. Innocent recreations, such as dancing and rural occupations, will answer this purpose.

If the patient suffer much pain in the head, the feet should be put into warm water every night, and a few ounces of blood extracted from a vein in the foot. If the pulse be full, or if the patient complain of difficulty of breathing, and a sense of tightness across the chest, the *timely* loss of blood from the arm, and a blister to the chest, may prevent consumption of the lungs.

If the patient be tainted with scrofula, the remedies recommended for that disease will prove most beneficial. See *King's Evil*.

The marriage state is much recommended by Dr. Cullen and our first medical authors ; and I believe it to be in such cases highly beneficial ; it is therefore an indispensable duty of parents or the female relations of a young woman so afflicted, to exert their influence in promoting it.

These remedies are adapted to the cure of the *retention* of the menses, termed chlorosis, or green sickness ; I shall now proceed to the consideration

Of the Suppression of the Menses.

In entering upon which I must observe, that every interruption of the menses, after it has *once* taken place, is not to be considered as a case of *suppression*, for the discharge on the *first* appearance is not always immediately established in its regular course, and, therefore, if any interruption happens in the space of the first or second year it may often be considered as a case of the retention, termed chlorosis, or green-sickness, especially if attended with the symptoms peculiar to that state. The cases, therefore, of suppression, are such as occur after the flux has *for some time been established* in its *regular* course, and in which the interruption cannot be referred to the causes of the retention termed chlorosis, but must be imputed to some resistance in the extremities of the vessels of the womb, induced by cold, fear, and other causes, which may produce a constriction of these extreme vessels. There are, however, some cases, which depend on *general* weakness of the system, and consequently of the vessels of the womb; but in such cases the suppression always appears as symptomatic of other affections, on the removal of which its recurrence depends.

A suppression of this periodical discharge seldom continues long without being attended with various symptoms of disorders in different parts of the body, arising from the blood being determined to other parts of the body, instead of the womb, and often with such force as to rupture a blood-vessel; hence bleeding from the nose, lungs, stomach, and other parts, are often produced: besides which the patient is commonly affected with hysteric fits, and the long train of symptoms of indigestion.

TREATMENT.—Warm bathing, particularly to the region of the womb*, by removing the constriction of the vessels, is to be considered the most powerful remedy.

A costive state of the bowels should be removed by the occasional use of such medicines, which will at the same time produce a determination of blood towards the womb, as the following pills :—

Take of the colocynth pill, with aloes, one drachm ; compound pill of galbanum, half a drachm ; prepared calomel fifteen grains. To be well blended and divided into thirty pills ; three of which are to be taken occasionally.

In case of violent head-ach or much cough, the loss of blood, according to the strength of the patient, or symptoms of plethora, will likewise be proper.

The Peruvian bark, steel, and other astringents usually employed in such cases to strengthen the system, by *increasing* the *constriction* of the vessels of the womb, often do much harm. The feet should be put every night in warm water for ten minutes, and kept warm during the day-time by the use of thick flannel socks. The diet must be regulated according to the symptoms of plethora and debility. If the patient do not suffer much from local plenitude, as head-ach, oppression of breath, &c. it should be of the nutritious kind, but not stimulating ; wine, particularly port, and spirits, should be avoided. Exercise, in this case, is of greater consequence than medicine, as it will obviate plethora, amuse the mind, and promote digestion. If, on the contrary it be attended with symptoms of plenitude of the vessels, local or general, a low diet should

* For the purpose of immersing the pelvis in warm water, a convenient bath has been constructed, named the Hip Bath.

be strictly observed, and all stimulants avoided, which might, by producing an afflux of blood to the head or lungs, produce a rupture of a blood-vessel, which might terminate in the death of the patient; when, therefore, the local symptoms run high, or the general health is much disturbed, the opinion of a physician of eminence should be taken, before the case is too far advanced to admit of relief.

The advertised nostrums for obstruction of menses are very numerous. No single remedy, it is clear, can be applicable to *all* cases of suppression.

Having considered the two kinds of interruption of the menstrual discharge, I shall now proceed to the consideration of the *increased* quantity, termed

Flooding,

as unconnected with a state of pregnancy or lying-in. The flow of the menses is considered immoderate when it recurs more frequently*, when it continues longer, or when, during the ordinary continuance†, it is more abundant‡ than is usual with the same person at other times. It is not, however, every *inequality* that is to be considered a disease, but only those deviations that are *excessive* in de-

* The usual period is from twenty-seven to thirty days.

† The time of its continuance varies in different women. It seldom continues longer than six days, or shorter than two. In general, women of a lax and delicate constitution have a more copious and continued discharge than the robust.

‡ It is extremely difficult to ascertain, *precisely*, what quantity is usually discharged; but women themselves can generally inform the physician, with sufficient exactness for regulating his practice, whether the discharge be immoderate; the average quantity is supposed to be about five ounces.

gree, which are *permanent*, and induce a *manifest state of debility*.

When a larger flow of the menses has been *preceded* by head-ach; giddiness, or difficulty of breathing, and has been ushered in by a *cold shivering*, and is attended with much pain in the back and loins, with a frequent pulse, heat, and thirst, it may then be considered preternaturally large; and in consequence of a repetition, the face becomes pale, the pulse weak, an unusual debility is felt on exercise, the breathing is hurried by much motion, and the back becomes pained from continuance in an erect posture; when the extremities become frequently cold, and when, in the evening, the feet are affected with a kind of dropsical swellings, termed *œdema*, we may, from these symptoms, certainly conclude the flow of the menses to have been *immoderate*, and to have induced a dangerous degree of weakness, which is often attended with giddiness, palpitation of the heart, affections of the stomach, frequent faintings, and a weakness of mind, liable to strong emotions from slight causes, especially when suddenly presented.

CAUSES.—It is produced by a preternatural determination of blood to the womb, or a plethoric state of the body, from high living, strong liquors, and frequent intoxication; violent straining, exercise, particularly in dancing and violent passions of the mind, cold applied to the feet, frequent abortions or child-bearing, and whatever will induce great laxity, as living much in warm chambers, and especially drinking greatly of warm enervating liquors, such as tea and coffee.

When excessive menstruation occurs after the age of forty, and particularly when it is preceded or succeeded by pains in the region of the womb, some organic disease may

be suspected, which may require the assistance of an experienced surgeon—a prolonged menstruation is also often the consequence of such disease.

TREATMENT.—When a copious menstruation has come on, it should be moderated as much as possible, by abstaining from all exercise either at the coming on or during the continuance of the menstruation; by avoiding an erect posture; by shunning external heat, as warm chambers and soft beds: by using as light and as cool a diet as former habits will allow; by obviating costiveness; by the use of laxatives that will give little stimulus, as castor oil, and lenitive electuary; the external and internal use of astringents to constrict the vessels of the womb, as the application of cloths sprinkled with vinegar to the region of the womb, and three table spoonfuls of the following mixture taken every four hours:

Take of red rose leaves, dried, half an ounce; infuse in a pint and half of boiling water, till cold; then strain and add acid elixir of vitriol, thirty drops; tincture of rhatany root, one ounce.

If the discharge, notwithstanding, continue immoderate, the following should be thrown up the vagina by means of the female syringe:

Take of pomegranate rind, bruised, three drachms; boil in a pint and quarter of water to a pint, then strain and add alum, a drachm and half. To be used cold*.

Ipecacuan powder, in the small doses of two or three

* Astringent medicines should not be employed unless the strength of the patient is much reduced, and the hemorrhage be evidently of a passive nature. The employment of astringent injections, before the system has been properly unloaded and the fever abated, by suddenly checking the discharge, will very likely be the means of producing inflammation of the brain or lungs, or bad inflammatory fever.

grains, so as to excite nausea and not vomiting, according to the experiments of Dahlberg, as related by Dr. Murray, has been found to answer in many cases. It should be administered with caution, since it sometimes happens that, by exciting vomiting, it will do more harm than good. Dr. Cullen once met with an accident of this kind, in which the vomiting increased the discharge to a great and dangerous degree. Spontaneous vomiting is however often attended, in such case, with the most decided benefit in checking the discharge; and I have known the exhibition of an emetic dose of ipecacuan powder snatch, as it were, the patient from the jaws of death.

When organic disease of the woman exists, the alterative pills and compound decoction of sarsaparilla recommended for correcting scrofula, page 371, will be necessary during the intervals of its recurrence.

In cases of flooding, attendant on miscarriages, or lying-in-women, the patient should be kept as quiet as possible, till medical assistance can be procured. If it be very considerable, a cloth wetted with vinegar may be applied to the loins and bowels till his arrival.

When flooding occurs during labour, the life of the woman may be considered in such imminent danger, that not a moment should be lost in obtaining the assistance of an able *man-midwife*.

PREVENTION.—When flooding arises from laxity of the system or the vessels of the womb, or if the discharge has induced much debility in the system, it will be proper, during the *intervals* of menstruation, to employ cold bathing and strengthening medicines, as the following:

Take of extract of rhatany root, two drachms; vitriolated magnesia, two drachms; dissolve them in six ounces of water and add aro-

matic tincture of rhatany, six drachms. Three table-spoonfuls to be taken three times a day.

The occasional cause should be carefully avoided. From inattention to such causes, and to the moderating of the discharge in the first beginning of the disease, it becomes violent, and of difficult cure.

Of the Cessation of the Menses.

The most critical period of a woman's life is, perhaps, when the menstrual discharge is about to cease, which is generally denominated *the turn of life*. It generally happens about the 40th and 50th year of her age, frequently about the 50th; and if this period be passed over without producing disease, her health may be considered established, and her life very good; but for the most part the entire cessation is succeeded by a determination of blood to the head, producing violent head-ach, and ultimately apoplexy; or to the lungs or bowels. At this period a woman should be very particular in avoiding a plethoric state of the system, by moderate exercise and abstemious diet; and to obviate costiveness by the occasional use of some active aperient medicine, such as the compound colocynth pill, as directed No. 46. If she be attacked with violent head-ach and giddiness, she should lose blood from the arm; and if disposed to apoplexy, the directions for the prevention of apoplexy, page 188, should be attended to.

OF THE MUMPS.

This disease has been little noticed by medical writers. It is often epidemic, and by some supposed to be infectious.

SYMPTOMS.— It generally comes on with the common

symptoms of fever, such as cold shiverings, sickness, vomiting, pain in the head, &c. which are soon succeeded by the appearance of a considerable tumour, in the neck, at the corner of the lower jaw ; often only on one side, but more frequently on both, sometimes finishing its course on one side, and afterwards attacking the other. It increases till the fourth day, and from that period it declines, and in a few days more, goes off entirely.

TREATMENT.—This disease commonly runs its course, without either dangerous or troublesome symptoms ; so that a low diet, and the occasional use of the neutral salts, No. 2, or aperient mixture, No. 62, are all that are requisite. If, however, the swelling be considerable, and the fever run high, with pain in the head, the application of leeches to the part (and sometimes the loss of blood from the arm, if the patient be of a full habit), a blister to the nape of the neck, and the saline mixture, No. 78, will be necessary.

OF NERVOUS DISEASES.

The appellation of *nervous* has been long a very fashionable term, but within these few years it is become more fashionable to attribute all complaints to the bile, so that hypochondriacs, and other people who have nothing else to occupy their mind but the state of their health, instead of being *nervous* now complain of being *bilious*. Of the two terms that of *nervous* is the most consistent, for in one sense, every disease that assails the human frame may be termed nervous, inasmuch as in all, the nervous system is, more or less affected ; in the *professional* acceptance of the word, it however, signifies, a *class of diseases*, in which

the nervous system is *primarily* or *principally* affected ; thus Dr. Cullen, and other writers, comprehend under this title all those morbid affections which consist either in the interruption or debility of the powers of sense or motion, or in the irregularity with which these powers are exercised ; which are arranged under four orders, viz. First, Such as consist in the loss of *voluntary* motion, as apoplexy and palsy. Secondly, In a *weakness* or *loss of motion* in either the *vital* or *natural* functions, as fainting, hypochondriasis, &c. Thirdly, *Spasmodic* affections *without* fever, as epilepsy, St. Vitus's dance, locked jaw, asthma, hooping cough, &c. And fourthly, Disorder of the *intellectual* functions, as insanity. Hence the term nervous embraces a great *variety* of diseases, remote in their causes and nature : some arising from an *increased* action, and others from a *diminished* one : and again, even such increased excitement may depend on debility and a diminished excitement, in consequence of compression of the brain from plenitude of the vessels and an increased action of the heart.

Medical practitioners often make use of the term *nervous* in accounting for sensations their patients may notice in detailing the various symptoms of their complaint, which I believe has given rise to the loose and inaccurate application of the word.

Quack doctors, however, artfully refer *all* the diseases of the body to a morbid state of the nervous system, in order to impose their nervous cordials on the credulous and ignorant. Thus, in their advertisements, a long train of symptoms are classed as *primary* diseases, and although *diametrically opposite* in their nature, the unfortunate suf-

ferers are assured, that by the use of *their* cordials, they may be most certainly restored to health ; hence the hypochondriac (who through weakness of intellects cannot discover the fraud) falls an easy prey to the allurements ; and unfortunately this class of people are but too numerous in this country, to support this disgraceful practice. If empiricism is at all to be justified, it is certainly in 'such lamentable cases of diseased imagination ; but their nostrums are too often taken in cases in which they are a slow but certain poison, and therefore the practice should not be permitted by the Legislature, especially in a country in which medicine has been more successfully cultivated than in any part of the known world. There is not another nation who suffer themselves to be so miserably duped by ignorance and fraud as the English. If the impositions were limited to the *purses* of the public, or the amusement of the mind of restless hypochondriacs, or what are more commonly called nervous patients, the injury would be but trifling ; but, unhappily, many of these illegitimate objects of speculation are dreadfully pernicious in their effects upon the health of those who are so weak as to purchase them. Common sense, one would imagine, was alone sufficient to detect the impudent falsehood of a quack, who proclaims to the world that his medicine is equally good for diseases *different in their nature*, their *sources*, and their *symptoms*, and which every apothecary's boy can tell him requires a different treatment.

That eminent and philanthropic physician, Dr. Hamilton, of Edinburgh, observes, that many shocking cases occurred within his observation, where women have neglected pursuing with steadiness the suggestions of regular prac-

titioners, in consequence of the *false confidence* they were induced to place in the dishonest promises of the discoveries of nostrums. A simple recital of the agony of such women, previous to death, might appear incredible! The interference of the Legislature, in checking this species of robbery, is certainly required, since not only is money stolen, but also life destroyed, and that too in a way of torture, which the severity of the law has never yet exercised on the most flagitious criminal!

“ It is really lamentable,” observes a late author, “ that his Majesty’s Attorney-General has not been informed of the indecent publications these impostors address to young people ; perhaps the time is approaching when he may take cognizance of these *moral essays*, and there can be little doubt but the sage and beneficent authors will be amply rewarded. Whoever publishes an obscene pamphlet is liable to fine, imprisonment, and the pillory. How much greater then should the punishment be for such as endeavour to poison the health and morals of a people, by the propagation of falsehood and imposition.”

Valetudinarians often voluntarily suffer more pain than ever was inflicted by the Inquisition. By swallowing every medicine which ignorant friends or artful quacks recommend, these wretched dupes, instead of disarming disease, only render it more formidable. One fourth of the diseases of mankind are in some degree imaginary ; and many persons contribute to the support of the physician, and pay him liberally for regular attendance, while they labour, not under bodily indisposition, but a “ *mind diseased*.” Many an athletic hypochondriac, whose sanity would be restored in a few days by exercise, now imagines

himself at the point of death, though he will probably out-live his physician*.

The revelling and excess of these unhappy beings, have produced in them such a morbid state of the nerves, and imbecility of mind, that they tremble at the momentary gloom occasioned by every passing cloud ; the sight of a hearse fills them with horror, and the mournful knell thrills through every fibre.

A variety of nervous sensations, tremors, and paralytic affections, are common followers of intoxication. “ The head and hands of some inebriates,” says Dr. Trotter, “ particularly in the morning, shake and tremble, but regain their usual strength, and become steady as the *cordial* dose is repeated. Men of this description are so nervous as to be a kind of living thermometer ; as the blood warms their spirits rise, and when it cools again by withholding their dram, they sink into languor and dejection. When affections of this kind make their appearance, the wretched inebriate has almost finished his career of dissipation ; the *silver cord* of life is nearly loosed, and the wheel broken at the cistern ! ”

The term nervous, as it is now generally applied, may

* About ten years since, I was requested to see a lady who was supposed to be in a dying state. On my arrival, I found her so far revived by (as she stated) a *thimbleful of Hollands*, as to give me a history of her complaints. The relation of her nervous symptoms occupied upwards of an hour. She had been ailing about fifteen years, during which time she had been given over no less than twenty times. By the use of a cordial medicine she was restored, and at this time drags on a miserable existence from the dread that every approaching night is to be her last, although her appetite is good and her sleep sound ! Her husband in one year spent one-fourth of his income in quack medicines, from which she derived no benefit.

be considered as synonymous with hypochondriacal. We however frequently meet with patients with a deranged state of the nervous system, unaccompanied with that turn of mind which I have noticed as constituting hypochondriasis; but such derangement may generally be traced to either some error in the digestive organs, visceral obstruction, or an accumulated or diminished excitability in consequence of the imprudent use of exhilarating cordials. When this unfortunate state of the nerves arises from indigestion, which is certainly the most frequent cause, the patient will derive considerable advantage by taking three table-spoonfuls of the following mixture two or three times a day:

Take of extract of rhatany root, two drachms; aromatic tincture of ditto, one ounce; sp. sal volatile, two drachms; pure water, twelve ounces.

If the stomach be much affected with acidity, nausea, or flatulency, an emetic of ipecacuan should precede the use of this medicine; and in case of costiveness, three drachms of Epsom salt should be taken every morning, dissolved in a wine-glassful of water. The rhatany root will not only promote digestion, but in allaying nervous irritability, is the most powerful remedy in such cases, we are acquainted with.

If there be any visceral affection, or if there be evidently a deficiency of bile, which may be known by the pale or dark appearance of the fæces, a grain of calomel (made into a pill with conserve of hips or soft bread), should be taken every other night for a week or ten days. During the use of these medicines, the patient should attend to the directions given for the prevention of indigestion, page 343.

The abuse of spirituous liquors not only disturbs the digestive organs, but so deranges the nervous system, that it receives false impressions, and communicates them to the sensorium. Hence external objects which would otherwise give pleasurable ideas, often excite disgust, and the mind of such a patient is truly wretched as long as he is not under the influence of the exhilarating cordial; by the frequent use of which the soul itself receives impressions that are incompatible with its reasoning power. The brain, of which the nerves are prolongations, is the most important organ of the animal body. It is not only the seat of all our rational and sensitive transactions, and the organ of an immaterial principle intimately united with it during life, and forming with it one distinct inseparable whole, but also an electrical apparatus to the system, supplying it with electric fluid, which keeps up the different secretions of the body and its vitality; hence it must appear obvious that a healthy state of the body must depend more on a healthy state of the brain, than any other circumstance. If its functions be disturbed or stimulated by the use of spirituous liquors, the circulation of the blood will be accelerated, the heat of the body increased, and all the secretions affected. Spirituous liquors raise the animal spirits and exhilarate the mind, which are only their *immediate* effects on the brain; for it is an invariable law of the human body, that the spirits are never artificially raised without being afterwards *more* than proportionably depressed; and thus after the effects of the spirit or wine are gone off, the person uniformly finds himself languid and enervated to a terrible degree; the ideas in the absence of the stimulus have all a gloomy cast, and every sensation is unpleasant; It leaves an aching void which

nothing can supply but a repetition of the cordial draught, which is no sooner swallowed than another is desired; thus by degrees the structure of the brain itself, the very origin or root of the nerves, is injured, and every species of delirium, often amounting to insanity, are the certain consequences*.

“ ——— an anxious stomach well
 May be endured: so may the throbbing head;
 But such a dim delirium, such a dream,
 Involves you; such a dastardly despair
Unmans your *soul*, as mad’ning Pentheus felt
 When baited round Cithæron’s cruel sides,
 He saw two suns and double Thebes ascend.”

Wine and ardent spirits of every kind ought only to be resorted to on *extraordinary* occasions, and in a *medical* point of view. Persons in good health have no need of them; they are better and stronger without them: for in proportion as they exhilarate, so do they afterward depress; and the habitual use of them, even in what is generally considered moderation; by too rapidly exhausting the excitability of the system; seldom fails to shorten the natural duration of life. In these observations it must be understood,

“ We curse not wine, the *vile excess* we blame.”

For after we have passed the meridian of life, a little wine

* The nervous cordials of many quacks are an ardent spirit, so powerful that a table-spoonful is equal to a glass of the strongest brandy. These stimulants, by exhausting the excitability, soon blast the vigour, and sap the foundation of the strongest constitution. It is only those whose nervous system has been impaired by the abuse of spirituous liquors, that would, however, receive even a temporary relief from such medicines; and we may conclude that those who have attested their efficacy were addicted to dram-drinking.

may be more serviceable than otherwise ; but the exact period when it should be employed must depend on the natural strength of the constitution and occupation of the person. Dr. Trotter is of opinion, that no person in health can require wine till he has arrived to forty. " He may then (says this author) begin with two glasses in the day ; at fifty he may add two more ; and at sixty he may go to the length of six glasses in a day ; but not to exceed that quantity even though he should live to a hundred." Good wine in old age stimulates the withered limb to motion, softens the rigid fibre, and produces an healthy determination of perspirable matter to the skin, on which account wine has been aptly called the "*milk of old age*." *

" Oh ! seldom may the stated hours return
Of *drinking deep* ; I would not daily taste,
Except *when life declines*, even sober cups ;
Weak withering age no rigid law forbids.
With frugal nectar, smooth and slow with balm,

* People are so differently affected by wine, that it is impossible to lay down any general rule for regulating the quantity. Those whose brains are not easily affected by it, may take more than those whose nervous system is readily affected by it. Hence we are to judge by the *effects* on the system, and not the quantity ; for if only half a glass affects the brain and inflames the system, it will prove more injurious to the constitution than if a bottle had been taken without such effects ; again, people are more susceptible of its influence at one time than another, according to the state of his mind, and in some degree even the atmosphere. It is a remarkable circumstance, that people who have been in the habit of drinking wine or spirits till their head is affected, almost every evening, die apparently of formidable disease of the brain, and yet on dissection, the brain exhibits no appearance of organic disease. The case I apprehend is, that frequent intoxication gradually impairs the electrical powers of the brain, and hence destroys life without producing organic disease.

The sapless habit daily to bedew,
And give the hesitating wheels of life
Glibber to play. But *youth* has better joys:
And it is wise when use with pleasure flows
To squander the relief of *age* and *pain*."

Such as have impaired their general health and nervous system, by frequent intoxication, or the too free use of spirituous or vinous liquors, will receive every benefit medicine can afford, by attending to the directions given for the prevention of indigestion. Page 343.

OF NETTLE RASH.

This eruption is so named from its resemblance to that produced by the stinging of the nettle. It is a very mild disease, and seldom requires the use of medicine. When it is attended with fever, small doses of the Epsom salt, as directed, No. 2, or the aperient mixture, No. 62, with twenty drops of the tartarised antimonial wine at bed-time, and a low diet, will be sufficient. If it be of a chronic nature, twelve drops of the diluted vitriolic acid, No. 18, may be taken three times a day (in a wine-glassful of cold chamomile tea). The aperient sulphureous water, as directed under the head *Rochelle Salts*, No. 2, page 8, is also a valuable remedy.

OF NIGHT MARE.

This complaint always happens during disturbed sleep. It comes on with a sense of great weight on the chest, with great horror and agitation of mind; sometimes the patient imagines he sees spectres of various shapes, which oppress and threaten him with suffocation; he attempts

to cry out, but often without effect ; sometimes the uneasiness continues after he awakes, so as to prevent his turning or moving in bed. The studious, and what are termed nervous people, are most subject to this disease.

CAUSE.—It arises from distension of the stomach ; from indigestible matter in the stomach of *supper eaters*, which, by pressing up the diaphragm, impedes respiration, and renders it short or convulsed ; hence people are most subject to it after a hearty supper, and when they lie on the back.

TREATMENT.—If the patient be of a plethoric habit, the loss of blood will be proper. The use of the aperient mixture, No. 62 ; a spare diet ; due exercise during the day ; a light supper ; keeping the feet warm by wearing flannel socks, and obviating costiveness, by the occasional use of the cathartic extract, No. 46, will in general be sufficient.

If the patient be what is generally termed nervous, a tea-spoonful of the volatile tincture of valerian, taken twice a day in a wine-glassful of cold chamomile tea, affords the most efficacious remedy.

When it arises from indigestion, the ground Jamaica ginger, No. 49, taken at night in a little water, will prevent its recurrence.

OF PULMONARY CONSUMPTION.

So great is the mortality of this disease in Great Britain, that practitioners on the continent have termed it the British malady. Within the metropolis it is said to destroy no less than 10,000 annually, independent of its ravages throughout the country. That consumption of the lungs is the most prominent disease in this country does not admit of a doubt, but I am far from believing that it is so

prevalent as represented by some late writers on the subject. The bills of mortality, to which they refer for a confirmation of their assertions, are by no means to be considered accurate records. The information of the cause of the death of the deceased is obtained from his friends, and if the parish clerk is informed that the person died of emaciation, debility, or cough, he concludes that it was a case of consumption, and as such it is registered. When a person dies of inflammation of the lungs, asthma, disease of the chest, or belly, the friends all consider it a case of consumption, hence we cannot be surprised that under this head, so great a number appears in the annual records of the dead. The present state of civilization, the modes of life practised in this country, and the increasing mutability of our climate, all tend to the production of consumption, particularly in habits predisposed to scrofula.

The indigent consumptive patients being deemed improper objects for admission into the London hospitals, in consequence of the supposition that their malady will only admit of palliation, induced me to propose the establishment of a Dispensary for the admission of consumptive patients, which the liberality of his Royal Highness the Prince of Wales, and the indefatigable exertions of a very benevolent lady residing in Yorkshire, enabled me to carry into execution. The number of patients that have been discharged cured, and apply every week for admission, convince me, that it will prove a greater blessing to this class of invalids than I first apprehended, by preventing their falling victims to the false promises of unprincipled quacks. The number of patients being regulated by the amount of its funds, I trust the committee will soon be ena-

bled to extend its benefits to all the consumptive patients that make application for the purpose*.

Of the diseases of the lungs denominated Pulmonary Consumption, there are two kinds which differ most in their nature and situation, both however, having the source in the constitution. The species most prevalent in this country, arising from a deposition of scrofulous lymph in the substance of the lungs, I shall denominate under the head of *Scrofulous Consumption of the Lungs*; and the other being an erysipelatous inflammation of the mucous membrane lining the windpipe and bronchial ramifications, I

* This charity was opened for the admission of patients the 25th day of March, 1805. The management of it is in the hands of the president, vice-president, and annual subscribers of one guinea. His Royal Highness the Prince of Wales has been pleased to express his approbation of the establishment in very flattering terms, and honoured it with his patronage. William Wilberforce, Esq. is president: and Sir Robert Salisbury, Bart. M. P.; Colonel Mark Wood, Bart. M. P.; Henry Willoughby, Esq. M. P.; Robert Ladbroke, Esq. M. P.; Sir John Palmer, Bart.; Sir William Altham, Bart. the Rev. Dr. Symmons; Dr. Harvey; Dr. Mingay; Thomas Walker, Esq.; Henry Upton, Esq.; Thomas Hammersley, Esq.; Charles James, Esq.; vice-presidents. Their Graces the Duke and Duchess of Leeds; the Earl Cadogan; the Right Rev. the Bishop of Landaff; the Lady Albinia Cumberland; the Countess of Gosford; the Lady Middleton; the Lady Effingham; the Lady Caroline Wortley; the Lady Olivia Sparrow; Mrs. Foljambe, Mrs. Dixon, Mrs. Rucker, Col. Clitheroe, Dr. Cheston, and J. H. Holden, Esq. are among its principal benefactors.

Subscribers of one guinea annually, are entitled to recommend three patients in the course of the year, and so in proportion to the sum subscribed.

Consumptive patients in the country may be supplied with medicine and advice gratis, on being recommended by a subscriber; the particulars of the complaint may be enclosed to Dr. Reece Henrietta-street, Covent Garden, of whom the rules, &c. of the charity may be obtained.

shall distinguish by the name of *Erysipelatous Consumption of the Lungs*.

It requires a knowledge of the anatomy of the lungs, and experience in pulmonic complaints, to enable a person to distinguish one species from another, which is absolutely necessary for the adoption of a judicious and successful mode of treatment: such cases should not be entrusted to the sole management of an inexperienced practitioner*, much less are they proper for domestic medicine. I shall therefore, in this work, give the outlines of a treatise on pulmonary consumption, I have long had in contemplation to publish, and which I hope to have it in my power to accomplish in the course of the ensuing year. In that work I shall describe the diseases as they appear on dissection, and relate several confirmed cases of each species, by way of illustrating the modes of treatment I shall there more fully detail.

Of Scrofulous Consumption of the Lungs.

Whatever occasions a determination of blood to the lungs, or excites irritation in them, will, in scrofulous subjects, produce partial effusions of scrofulous lymph in the cellular substance of the lungs, technically termed tubercles. The depositions, in proportion to their number and size, preventing the due expansion of the lungs and

* It is extraordinary, that notwithstanding the prevalence of these diseases of the lungs, not one physician in a hundred is acquainted with the nature of the disease that takes place in the lungs. They talk of ulceration of the lungs as denoted by purulent expectorations, but if they are questioned respecting the seat or nature of the ulcer, they are perfectly at a loss for a reply.

of course the free circulation of the blood through the pulmonary system: the consequences of which are shortness of breath, palpitation of the heart, distension of the vessels of the head and neck, occasioning head-ach*, and the rupture of blood vessels, producing hæmoptoe†.

These depositions will often take place without producing any other inconvenience than head-ach and difficulty of breathing. Like the scrofulous enlargement of the glands of the neck, they remain stationary for many weeks, and at length the lymph is often absorbed and no mischief ensues. If the disease be aggravated by improper mode of living, or when the scrofulous diathesis runs high, an inflammatory action takes place and advances to suppuration, forming what are termed vomicæ, which generally empty their contents into the bronchial ramifications. During the inflammatory action, the patient is frequently affected with rigors and slight pains on taking in a deep inspiration; but it is remarkable that he is frequently not affected with cough, till the matter in the abscess is discharged into the bronchial ramifications; hence instead of cough being the *first* symptom of incipient consumption, in this species it is a symptom of the last or suppurative stage. The inflammation first takes place in one or two collections of lymph, and

* It is worthy notice, that drowsiness, and head-ach, are generally the first symptoms the patient complains of.

† In every case of consumption following hæmoptoe, which I have had an opportunity to examine the state of the lungs, I have uniformly found the same morbid appearance, as when no such occurrence happened. Hence I suspect hæmoptoe is generally, if not always occasioned by the obstruction to the circulation of the blood, produced by the loaded state of the cellular substance of the lungs, the consequence of which is partial congestion of the blood vessels.

soon after they have suppurated, it will commence in others; and this process will go on till the whole substance of the lungs be nearly destroyed; hence the progress of the disease is a succession of partial suppurations. On the breaking of an abscess or vomica*, the patient uniformly experiences considerable relief. The breathing is rendered more free, the expectoration facilitated, the hectic fever abated, and the appetite improved. Hence consumptive patients are led to believe that they are in a convalescent state, and after a few of the vomicæ have broken, the patient is certainly not so much inconvenienced by the subsequent suppurations†.

Sometimes the vomicæ break on the external surface of the lungs next to the ribs, and the matter is evacuated into the part termed the cavity of the chest, in which case adhesions take place between the pleura of the lungs, and that lining the ribs, producing acute pain or stitches, and preventing the patient lying on the opposite side.

The suppuration of the different collections of scrofulous

* The aperture leading to the cavity of these abscesses are so small that it requires very close inspection to discover them.

† The quantity of pus brought up by expectoration is very small, being enveloped in mucus. When an abscess breaks the patient has generally a more violent fit of coughing than usual, and brings up a quantity of matter more unpleasant to the taste, and generally streaked with blood. This appears to happen about every three weeks. Several experiments have been suggested to ascertain whether a patient expectorates pus. The best method is to agitate the matter brought up with some *distilled* water in a vessel, so as to separate the pus from the mucus. If there be any of the former it will be deposited, while the latter will rise to the top. Pus may also be discovered from the mucus by careful examination by a microscope.

lymph goes on till so great a proportion of the substance of the lungs is destroyed as to render them incapable of supplying the blood with a sufficient quantity of oxygen for the support of life. The powers of the system in consequence must give way, and a variety of symptoms ensue. The pus, particularly when evacuated in the cavity* of the chest, being taken up into the circulation, produces hectic fever and its concomitant symptoms, such as copious perspiration, occasional diarrhæa, turbid urine, &c. as the vital powers decline other symptoms succeed, as swelling of the legs, pearly appearance of the whites of the eyes, and if the stomach does not perform its office, which is seldom the case, the body will rapidly sink under the disease. As the symptoms indicating the inroads of the disease on the constitution come on, those of the first stage gradually leave the patient, as head-ach, costiveness, loss of appetite, frequent rigors; the fever also remits, and towards the latter stage intermits. The lungs by degrees losing their power of oxygenating the blood, oxygen from the air is attracted by the red particles of the blood from the lips, the internal surface of the nostrils, and the cheeks, producing redness and heat of those parts†, and as the disease of the lungs in-

* It is worthy of notice, that those patients have suffered most by hectic fever, who have had most disease in the cavity of the chest, while those who have experienced very little or no symptoms of hectic fever, have been free from such disease; the small abscesses having emptied themselves into the bronchial ramifications, and the matter brought up by coughing.

† This redness of the skin induced some writers to suppose that the blood is over-oxygenated, and this supposed superabundance of oxygen they consider the chief cause of the disease: thus inferring that the lungs in a diseased state perform their office better than in a state of health! The blood how-

creases, this redness is extended more over the face, and the parts of the body exposed to the atmosphere, as the fingers, ears, &c. Sometimes the internal surface of the windpipe is much inflamed, and a few days before the dissolution of the patient the inflammation often spreads to the mouth and fauces, and in a few instances I have known it to extend down the gullet and throughout the intestinal canal. This inflammation is of the aphthous kind, and is exceedingly troublesome to the patient.

It is remarkable, that notwithstanding the great emaciation and debility of the body, the energy of the brain seems in no degree diminished, the memory and judgment remaining unimpaired. Thus the mind is happily supported by a hope of recovering, often till within a few minutes of the entire cessation of the vital functions.

TREATMENT.—One reason why pulmonary consumption is so destructive to the human race of this country is, that physicians not being sufficiently acquainted with the nature of the disease, have not proportioned their remedies to the extent of the mischief; and in the next place, patients not aware of the tendency of the disease in the first instance, neglect to apply for proper medical aid, till the lungs have sustained too much injury to admit of recovery. No disease incident to the human frame is more easily cured than incipient consumption, but unfortunately it is so insidious in its attacks, and although the lungs are so essential to life, the disease produces so little inconvenience to the patient, that he does not think it necessary to

ever taken from consumptive subjects in an advanced state of the disease, indicates a great deficiency of oxygen.

to have recourse to medical advice till it has arrived to an incurable stage. Such is the delicate structure of the lungs, and their vast importance in the animal economy, that instead of treating the disease with simple emulsions and linctuses, (the common practice of apothecaries and physicians), the most prompt and decisive treatment is necessary to arrest the progress of the disease and save the life of the patient.

The objects we should have in view in the treatment of this disease, are to quiet or arrest the inflammatory action going on in the lungs, to correct the scrofulous diathesis of the constitution, and promote the absorption of the lymph deposited in the substance of the lungs.

For the purpose of arresting the disease it will be necessary to take five or six ounces of blood from between the shoulders, or over the ribs of the side most affected, by the operation termed *cupping*. As scrofulous inflammation on the surface of the body is often increased by copious bleeding, I do not think it safe, to exceed six ounces of blood in cases of consumption. If the disease have so far advanced that the powers of the constitution have much sunk under it, the quantity of blood should not exceed two ounces, and should not be repeated if the strength of the system appears to be reduced by it.

A blister should be applied on the side most affected, and if both sides are equally affected, it will be necessary that one should be applied to each, the discharge of which should be kept up by dressings of the Savin cerate, or Spanish-fly ointment. If the discharge be not sufficient, a seton should be applied between the shoulders, and great care taken that a proper discharge be kept up from it, otherwise it will prove of no avail. A seton appears in general to most

consumptive patients a very severe remedy; it is however the most important in this disease, and without it medicine will probably have no other effect than palliation. It is common for consumptive patients to refuse to submit to a seton in the first stage of the disease, but I never knew one that did not repent his obstinacy, and was afterwards very desirous to have it, when the disease was too far advanced for it to afford any essential benefit. The discharge of a seton not only quiets the disease of the lungs, but also corrects the scrofulous diathesis of the constitution.

The state of the bowels must also be attended to, for costiveness particularly aggravates the disease of the lungs. For the purpose more of obviating costiveness than purging the bowels, one or two drachms of the Epsom salt should be taken every or every other morning, so as to produce two evacuations every twenty-four hours.

When the inflammatory state of the constitution is considerably abated, a little mercury will prove highly beneficial, in promoting the absorption of the scrofulous lymph, deposited in the cellular substance of the lungs, and also tend to correct the constitution. It may be given with the precipitated sulphur of antimony in the following form :

Take of calomel prepared, fourteen grains; precipitated sulphur of antimony, twenty grains; extract of poppies, half a drachm: to be well mixed together and divided into fourteen pills,

One of which may be taken every night at bed time for one week, then to be discontinued for five days, and retaken in the same manner for a week longer. By omitting one week in a fortnight these pills may be continued for a month, unless contraindicated by the effects of the mercury on the mouth or bowels. If it should disagree with the stomach or bowels, the ointment of the hydro-sublimed

calomel may be rubbed into the skin as directed page 4. If the pulse be quick and the constitution very feverish or irritable, mercury will prove hurtful, by increasing the irritability of the system ; we should, therefore, never venture on its exhibition till the circulation be quieted, and the irritability of the system abated. For these purposes it will be necessary to give two table-spoonfuls of the following mixture three times a day, which will also allay cough, and promote expectoration :

Take of the acetated ceruse, five grains ; simple oxymel, one ounce ; ipecacuanha wine, one drachm ; almond emulsion, seven ounces.

Many medical gentlemen are prejudiced against the acetated ceruse, but I never knew this mixture disagree with a patient, although I have continued it a month at a time. In this species of phthisis I am persuaded it is a most valuable medicine, and more safe and effectual in quieting the circulation than the fox-glove. After the patient has taken this mixture regularly three days I have commenced the exhibition of mercury as above directed, and continued it during its use.

The warm bath (about 96°) twice a week, tending to remove congestion of the lungs, by promoting the circulation in the extremities, and in the surface of the body, is also a very valuable auxiliary. Many whose cases appeared desperate, after the use of the warm bath three or four times, have made such rapid progress to health, that I have been induced to attribute their recovery chiefly to it. The warm or tepid bath generally facilitates breathing, takes off the quickness of the pulse, relieves the pains of the chest, and appears to invigorate the system. When the patient is evidently in a convalescent state and nearly free from fever, a gentle emetic of ipecacuan powder may be administered

every five days, for about three weeks or a month, which by exciting the action of the absorbent vessels of the lungs will accelerate his recovery, and prevent a recurrence of the disease.

The inhaling of the vapours of resinous gums and of factitious airs has been much extolled as a remedy for pulmonary consumption, when the disease is confined to the *membrane* lining the windpipe and bronchial ramifications ; they may, as a *topical* application, have some beneficial effect ; but in this species, by provoking cough, they are generally hurtful, and those practitioners that have recommended such remedies, I am inclined to believe, were not acquainted with the nature of the disease that takes place in the lungs.

The nocturnal perspirations, even in the last stage, are to be considered of a *critical nature*, and therefore should not be checked, either by diminishing the quantity of the bed cloaths, or by the common practice of throwing part of them off towards morning. When they are in such profusion as to *weaken* the patient, they may be sufficiently restrained by taking ten drops of the diluted sulphuric acid every night, or twice in the course of the day, in a little water, without producing the mischief that must follow the exposure of the body to a cold air.

The purging that occurs during the last stage is, like the perspiration, also critical ; the object of practice is, therefore, to *moderate* and *not to check it*. When the evacuation is too frequent and copious, the following medicine may be taken in lieu of the cough mixture :

Take of the decoction of calcined hartshorn, with double the quantity of gum arabic, seven ounces ; tincture of opium, from twenty to thirty drops ; tincture of cinnamon, half an ounce.

Two or three table spoonfuls to be taken every three or four hours.

DIET, DRESS, &c.—From the foregoing directions it must appear evident that a low diet should be adopted, and every thing avoided that has a tendency to inflame the constitution.

The jellies of the arrow-root, sago, tapioca, oatmeal, and light bread-pudding, may be occasionally varied, as agreeable to the inclination of the patient. The animal jellies of calves' feet, hartshorn shavings, and isinglass, a little boiled fowl, shell-fish, flounders, and soles (without sauce) may be allowed when the symptoms do not run high, or when the system is not irritable; but animal food in substance, as beef, mutton, lamb, and pork, and wine and spirits of all sorts, must be scrupulously avoided. The beverage should be very simple, such as the almond emulsion, whey, distilled water, linseed-tea, weak lemonade, butter-milk, and barley-water. Flannel should be worn next the skin, and any sudden transitions from heat to cold, and *vice versa*, be carefully guarded against; and as a light atmosphere is more easy of respiration than a heavy one, the patient should sleep, and live as much as possible, in the uppermost room of the house. By a strict observance of these instructions, the progress of the disease may be speedily and effectually suspended, the effect of the diseased action removed, the lungs rendered adequate to their important functions, and the patient of course gradually restored to his usual strength and health.

Some writers disapprove of a milk diet in this disease. The experience of many ages, and the arguments which may be adduced from analogy, have however

proved, to the conviction of every candid enquirer, that it affords a nutriment admirably adapted to support the debilitated frame of a consumptive patient. When it is found to be too heavy for the stomach, it may be diluted with barley water or distilled water, which will often reconcile it to the stomach. Ass's milk being thinner than that of the cow, often agrees better with the patient ; some, however, have so great an aversion to the milk of this animal, that they cannot be prevailed on to take it ; in such case the following will afford an excellent substitute :

Take of eringo root and pearl barley, of each half an ounce : liquorice root, sliced, three drachms ; distilled water, one quart : boil them together over a slow fire to a pint, then strain off the liquor and add an equal quantity of fresh cow's milk,

Dr. Lambe has lately published some interesting observations on the efficacy of *distilled* water in constitutional diseases. This esteemed author, by some nice chemical experiments with the water in common use, has detected a *septic poison* (probably produced by the putrefaction of animal and vegetable substances). To the introduction of this poison into the system, he is of opinion many of the most formidable diseases are produced. He therefore proposed to cure such diseases, by confining the patients to the use of water purified by distillation.

Distilled water is no doubt a very excellent alterative, but I am fearful its salutary effects on the constitution are too slow to be of much service in consumptive cases ; in more chronic diseases I believe it may effect a favourable change in the constitution, and as it affords a pleasant beverage, I have recommended its use to consumptive patients in lieu of common water.

A flannel dress next the skin should also be adopted,

and changed at least every morning. Fleecy hosiery, on account of its softness and thickness, is perhaps preferable to flannel. Some authors recommend a waistcoat made with the dried skins of hares, which on account of retaining the perspirable matter, is more objectionable than flannel. The feet should be kept warm by wearing flannel socks.

EXERCISE.—As much muscular exertion, by quickening the circulation through the lungs, will provoke cough, and tend considerably to aggravate the organic mischief, such exercise should be adopted in which the muscles of the body are little employed, as swinging and riding in a carriage, which instead of accelerating the circulation, generally diminish the action of the heart and arteries, and thus quiet the system. It is very likely that on this principle the motion of a ship in sailing has proved, in so many instances, beneficial in pulmonary consumption. As this kind of exercise has been found to prevent œdematous swellings of the legs, it is probable that it increases the action of the absorbent vessels, although it diminishes that of the arterial system. After having been in a *cold* air, a patient should be very careful not to return to a warm room suddenly, or immediately approach the fire, for the excitability of the lungs being much increased by the respiration of cold air, the sudden inhalation of heat will irritate the internal membranes, and thus excite cough, and increase the difficulty of breathing and the secretion of mucus, &c.

The exercise of the dumb bells is much recommended for the purpose of *opening* the chest. As the capacity of the lungs is adapted to that of the chest, no advantage can arise from it. If it was possible by such exercise to ex-

tend the capacity of the chest, the lungs would very likely be lacerated by it. I have known two cases of rupture of blood vessels of the lungs occasioned by this exercise, which I attribute to the acceleration of the circulation produced by it.

Many authors advise consumptive patients to take much exercise in the open air, as riding on horseback, digging in a garden, &c. Nothing in my opinion is more likely to aggravate the disease, and by attending to it many have, doubtless, lost their lives.

In females, this disease is often attended with a retention or suppression of the menses, which in all cases, may be considered the effect and not the cause of the disease, the patient generally becoming regular as the disease of the lungs is diminished. It is not therefore of that importance that females imagine; although it would be adviseable to promote this healthy secretion, could medicines be with safety employed for that purpose. When this periodical evacuation is too copious, or frequent in occurrence, it rarely affords the mitigation of symptoms as the circumstances would lead one to expect. It is remarkable, however, that when a consumptive patient breeds, the disease is frequently suspended: the congestion of the vessels of the lungs being relieved by the blood being more determined to the womb, and by a healthy state of the system brought on by gestation. The same takes place in cases of insanity, which can be accounted for only on the principle of a peculiar irritation of the brain, producing a derivation from the lungs, as in insanity there is seldom an increased afflux of blood to the brain.

It often happens, that on relieving the disease of the lungs, some local disease will appear, and increase as the phthisical symptoms abate. Such affection should be considered of a critical nature, and therefore not checked by discutient means, but encouraged by the application of warm poultices or fomentations. In some instances I have known consumption to terminate in white swelling of the knee-joint, which after advancing to suppuration, and ending in a favourable union of the bones, the lungs remained free from disease ; but when this chance was not given the patient by the hasty amputation of the limb, the phthisical symptoms always returned with increased violence. The occurrence of piles, and abscesses of the skin, are likewise of favourable import, and should not be repelled.

When the disease has arrived at its last stage, the only object of practice is to render the life of the patient as comfortable as possible, by palliating the most distressing symptoms ; for this purpose, laudanum, or the black drop, must be administered in such doses as the violence of the symptoms may indicate. It may be given in conjunction with twenty or thirty drops of sweet spirit of nitre, or Hoffman's anodyne liquor, in any simple vehicle, which often act as a charm in abating the violence of the cough, and the affections of the bowels, procuring for the most part refreshing sleep, and calming the mind. With respect to diet, the inclination of the patient may be consulted and gratified, unless the pain in the bowels indicate inflammation of the intestines, (which in this stage is a very common occurrence) when the use of meat in substance, acids, and wine, should be prohibited, and a mucic-

luginous diet adopted, as arrow root, sago, and such like.

But as it is often difficult to determine to what extent the disease of the lungs is arrived, unless the means I have suggested have had a proper trial, or the practitioner has had an opportunity of observing the progress of the disease, the recovery of the patient should always be attempted, before the palliative treatment be adopted, as I have in many instances succeeded in curing patients who had been pronounced irrecoverable.

From the foregoing observations it will appear—That this species of consumption is so insidious in its attack, as often to proceed to the second stage before its nature becomes evident—That the heating anodyne medicines of quacks, sold under fictitious names, only relieve the cough, while they uniformly hasten suppuration, and thus render the recovery of the patient extremely doubtful—That from the nature of the disease it will not admit of a specific, and is to be cured only by a combination of remedies, of which the counter-irritation of perpetual blisters, seton, or issue, is the most important—That the symptoms denoting the last stage are often fallacious—and therefore the recovery of the patient should in all cases be attempted, before the case is pronounced hopeless, and consigned to a mere palliative treatment.

AIR.—It certainly is of some importance that a consumptive patient should reside in a pure atmosphere, but I do not conceive it of that great consequence as it is generally imagined; a light air always proves more easy of respiration than a very pure dense atmosphere. The air of London is by no means so insalubrious as it has been re-

presented to be by medical writers ; nor do I believe that diseases of the lungs are, in proportion to its inhabitants, so frequent in town as in the country. The air of Islington, Hampstead, Highgate, and Pentonville, I am persuaded, is good for consumptive and asthmatic patients, notwithstanding their contiguity to London. Exmouth and Sidmouth, in Devonshire, being protected from the inclemency of the piercing north-east winds by their peculiar situations, afford a better residence during the winter season than any part of this island, and the number of consumptive patients that resort thither, from the most remote parts of the united kingdom, is very considerable. Malvern, on account of the air, and purity of the water, is however preferable as a summer residence.

PREVENTION.—If there be a strong predisposition to the disease, it will be adviseable not to heal the blister immediately on the disappearance of the symptoms, but to keep up the irritation for some days, by applying a Burgundy pitch plaster over the part, or by means of an issue, or a seton, either between the shoulders, or over the breast-bone, or the side that was most affected.

Temperance, and the use of flannel next the skin, are to be considered the most powerful preventives of a recurrence of the symptoms, by due perseverance in which, the predisposition to the disease may in course of time be entirely destroyed.

Of Erysipelatous Consumption of the Lungs.

This species of consumption consists in an erysipelatous inflammation of the mucous membrane of the trachea and bronchial ramifications, and sometimes extending itself to

the air cells. The exciting causes of catarrh in an erysipelatous habit, or a person disposed to erysipelas will produce this disease.

It is preceded by head-ach, rigors, and the usual symptoms of fever, which gradually decline as the cough comes on. The cough commences with slight hoarseness, a tickling sensation at the top of the windpipe, and attended with an expectoration of a thin frothy mucus, of a saltish taste. In the course of three or four weeks the expectoration becomes thicker, and instead of being saltish, appears sweet to the patient, resembling honey, and at length the membrane being slightly excoriated, the matter brought up has a more puriform appearance, often tinged with blood, and in the last stage of the disease generally emits a foetid odour. If the mischief does not extend to the cellular substance of the lungs, the patient will remain free from stitches, rigors, and shortness of breath. The hectic symptoms do not come on till within ten days or a fortnight of the dissolution of the patient. The difference between this species and the scrofulous consumption is, the latter commences in the substance of the lungs, and the mucous membrane is not affected till the small suppurations break, and by degrees empty themselves into the bronchial ramification, whereas the former commences in the mucous membrane, and the cellular substance is in general free from disease. In the scrofulous species the cough often does not come on till the disease has arrived to an incurable state, while in the erysipelatous species, the cough is almost the first symptom. In it the substance of the lungs not being loaded by a deposition of lymph, their expansion is not affected, the patient having the power of taking in a deep inspiration. The former

occurs in scrofulous constitutions, and the latter in erysipelatous habits*.

TREATMENT.—On the first attack of this disease, the medical and dietetic treatment recommended for catarrhal cough, will generally succeed in curing it. (See *Cough*.) If the patient be of a plethoric habit, the loss of eight or ten ounces of blood from the arm, or from the chest by cupping, will be necessary. If the cough should continue after the inflammatory state of the system be diminished, the following mixture, taken in the quantity of two table-spoonfuls three times a day, by correcting the discharge, will complete the cure, provided the mucous membrane has not sustained much mischief :

Take of the Canada balsam, two drachms ; gum arabic three drachms ; Ipecacuan wine, one drachm ; acetated ceruse, four grains : rose water, six ounces : syrup of white poppies, six drachms.

Dissolve the gum arabic in half an ounce of water, then rub it with the balsam, and when well blended, gradually add the rose water and syrup : and lastly, the acetated ceruse previously dissolved in a tea-spoonful of good vinegar. After taking this mixture three days, the acetated ceruse may be reduced to two grains, and in three days more may be entirely omitted.

If the expectoration be difficult, a dram of gum ammoniac, or tincture of squills, may likewise be added ; and if

* That there is the erysipelatous habit, arising from a preternatural saline state of the blood, it is presumed no practitioner of any observation will deny. In such subjects inflammation, particularly of secreting surfaces, runs high, and is very difficult of cure. In them fluor albus, gleet, inflammation of the eyelids, &c. always prove very obstinate : they are also subject to chronic inflammation of the throat and leprous eruptions of the skin.

the cough be very troublesome, six or eight grains of the styrax pill may be taken at bed-time.

If the matter expectorated be much diseased, a little mercury will also be necessary, in the manner directed for the scrofulous species, page 413.

A perpetual blister, or a seton between the shoulders, or over the breast-bone is necessary if the patient be of a plethoric habit, or the inflammatory symptoms run high.

In case of profuse perspiration, eight drops of the diluted vitriolic acid should be taken in a little distilled water, two or three times a day : but if it should not be in such quantity as evidently to reduce the strength of the patient, it should not be checked suddenly.

Colliquative diarrhœa may in general be relieved by the native vegetable acids, as lemon-juice, a roasted apple, &c. : but in case this symptom should prove obstinate, a teaspoonful of preserved sloes may be taken frequently ; or the following mixture may be substituted for the balsamic mixture, till the evacuations are reduced to one or two in the course of twenty-four hours :

Take of the white decoction, seven ounces : liquid landanum, forty drops ; tincture of cinnamon, three drachms. Mix.

Two or three table-spoonfuls to be taken every three or four hours.

The inhalation of anodyne and other vapours, as topical applications, one would suppose would prove beneficial in this species particularly ; but they have never answered my expectations ; and in some instances by provoking cough, have certainly proved prejudicial ; they are, therefore, an ambiguous remedy, and should not be persisted in, if they evidently produce irritation in the lungs.

DIET.—The instructions given for the diet and dress, and

the observations made on air, exercise, and distilled water, under the head of Treatment of the Scrofulous Consumption of the Lungs, equally apply to this species.

The decoction of the Iceland liverwort, (See No. 117, page 81.) affords the best beverage in this disease.

Another species of pulmonary consumption* very frequent in this country, occurs in people after the age of fifty, and which I shall therefore term

Phthisis senilis, or Pulmonary Consumption of Elderly People.

It sometimes commences with the ordinary symptoms of catarrh, but is more frequently the sequel of some affection of the lungs of long standing, such as spasmodic asthma, dyspnœa, or chronic cough. It is neither attended with acute pains in the chest, much difficulty of breathing, nor fever, and the pulse but little affected. The mucus which is expectorated with facility, is generally inodorous, tasteless, and clear, and although often so considerable as to amount to twenty or thirty ounces in the course of the day, is very rarely vitiated, or streaked with blood. This disease commences with great debility of the system, and in the progress of the disease the legs and belly are frequently affected with dropsical swellings. The patient throughout the disease, is generally free from hectic fever, unless the matter expectorated becomes vitiated, in which case it is very trifling. The powers of the

* The term pulmonary consumption, applied to this and the preceding affection, may to some practitioners appear objectionable, because the lungs sustain no loss of substance; but as the emaciation of the body is in consequence of the disease of the lungs, I conceive the term very applicable.

system are at length so reduced that the patient has not the power of bringing up the phlegm, without an effort of the midriff, nearly amounting to vomiting. The bronchial ramifications in consequence become so loaded as to occasion suffocation.

This species differs from the two foregoing diseases in being entirely free from any inflammatory action, either in the substance of the lungs, or the internal membrane; being a disease of debility only. On dissection the lungs exhibit no appearance of ulceration. The arteries of the lungs as well as the aorta are always more or less ossified, and sometimes there is a deposition of ossific matter in the substance of the lungs.

TREATMENT.—In the treatment of this disease the strength of the system must be supported by tonic medicines, and nutritious diet. The increased secretion of phlegm does not arise from inflammation, but relaxation, and therefore whatever tends to reduce the strength of the patient will aggravate the disease, and hasten his dissolution. The cough again is an effort to clear the bronchial ramifications and windpipe of the phlegm, and of course will be in proportion to the quantity secreted; anodyne medicines, such as opium, &c. should not therefore be employed to allay the cough.

The ætherial tincture of steel is a very valuable medicine in this species. From twenty to thirty drops may be taken three times a day, in three table-spoonfuls of the following mixture :

Take of infusion of rhatany root, seven ounces ; oxymel of squills, six drachms ; tincture of cardamoms, six drachms. Mix.

If it be attended with a relaxed state of the bowels, the white decoction should be taken with a little nutmeg

grated in it, for the common beverage, or two tea-spoonfuls of the tincture of cinnamon in three table-spoonfuls of lime water, three times a day. If on the contrary the bowels should be in a costive state, a few grains of rhubarb should be taken every morning, so as to produce one evacuation every twenty-four hours.

DIET.—The diet should be nutritious, but not stimulating. In general, mild soups and broth are preferable to meat in substance. If the patient has been accustomed to take wine freely, he may be allowed a glass or two of port wine in the course of the day, in case it does not affect the head, or make him feverish or uncomfortable.

The decoction of liverwort may also be taken as directed, (No. 117, page 81).

If the patient be not much debilitated, an emetic of Ipecacuan powder, (See No. 23, page 29,) may also be administered about once or twice a week.

If the patient be subject to nocturnal perspirations, two drachms of the diluted vitriolic acid may be added to the mixture of infusion of rhatany root, &c.

Other species of pulmonary consumption are enumerated by Sauvage, in his Nosology, such as the hemoptoic, when in consequence of the rupture of a blood vessel of the lungs—Chlorotic, when attended with a retention of the menses, &c. &c.—The rupture of a blood vessel of the lungs, I believe, is always the consequence of the interruption to the free circulation occasioned by a deposition of scrofulous lymph in the substance of the lungs, termed tubercles; so that hemoptoe is merely symptomatic of the scrofulous species. The retention or suppression of the menses is also an effect of the disease, and is generally attendant on both species. The varieties being named according to the causes which bring them into action, such distinctions

cannot be attended with any advantage in practice; particularly as they equally apply to both the scrofulous and erysipelatous species.

OF PAIN IN THE EAR, OR EAR-ACH.

Acute pain in the ear, to which children are chiefly subject, most frequently arises from inflammation. It is accompanied by a sense of throbbing pain, and noise in the ear; sometimes deafness, and general symptoms of fever. In every affection of this kind, dispersion of the inflammation is to be attempted, first by dropping a few drops of laudanum into the passage, and the application of a blister behind the ear, which should be kept open till the symptoms are considerably abated.

In all cases of a slight nature this treatment will be found to succeed; but in more violent affections of this kind, suppuration is often unavoidable: the tendency to this is marked by an increase of pain in the organ, and by a *more general* affection of the head. The only treatment then left is to endeavour to promote suppuration by fomentation or the injection of warm water into the ear, by means of a syringe. A poultice has also been advised, but it is rather here an inconvenient form.

When matter once appears, it is to be removed by injecting warm water into the ear. Should the discharge be too profuse, or long continued, mild astringent injections will be necessary, consisting of five grains of acetated ceruse, or vitriolated zinc, in eight ounces of rose water.

Sometimes the disease extends to the bone, in which case, before a cure can be effected, exfoliation will take place; which must be left entirely to the efforts of nature.

As deafness is too often the consequence of this com-

plaint, the advice of an experienced surgeon should be taken in the first instance.

OF PALPITATION OF THE HEART.

This affection is frequently so violent as to be heard at a considerable distance, and sometimes the action of the heart may be perceived on the outside of the clothes.

When it arises from a *plethoric* state of the system, the loss of blood, and the use of the aperient mixture, No. 62, are necessary; when from *irritability* of the nervous system, twenty drops of ether, with a tea-spoonful of tincture of castor, in a small wine-glassful of valerian tea, two or three times a day, will prove serviceable. When it proceeds from *mal-formation* or *disease* of the heart, or of the large vessels, relief may be obtained by avoiding plethora, much bodily exertion, full meals, and excesses of every kind, with the use of such medicines as are calculated to allay nervous irritability, as camphor, valerian, laudanum, and ether. When the action of the heart is very violent, from ten to twenty drops of the tincture of foxglove may be taken two or three times a day, in three table-spoonfuls of the saline mixture, and a blister applied to the left side: if its violence should not abate after the use of these remedies for two or three days, two grains of the extract of tobacco or hemlock powder may likewise be taken every six or eight hours.

This affection is sometimes symptomatic of water in the pericardium, which chiefly occurs in aged people; when small doses of calomel, (about one or two grains) taken every night for a fortnight, or till the mouth is rendered tender by it, and twenty drops of muriated tincture of

steel, in a glass of water three times a day, with the jolting of a carriage once a day*, will prove very beneficial.

This disease is sometimes the consequence of the communication between the auricles of the heart, which exists during the fœtal state, remaining unclosed ; such a case will only admit of the palliative means of avoiding plethora, full diet, violent exercise, and emotions of the mind.

PALSY.

SYMPTOMS.—Palsy consists in a loss of tone and diminution of the vital powers, sometimes of the whole body, more frequently of one side, rarely the lower extremities from the loins, and sometimes confined to a muscle or nerve, as of the bladder and anus, suffering the urine and stools to pass off involuntarily ; sometimes the muscles of the tongue, occasioning stammering and loss of speech ; sometimes of the optic nerve, producing the disease called gutta serena, or imperfect vision ; and sometimes the nerve of the ear, producing deafness. In bad cases, where one half of the body is paralyzed, the speech is much impeded, or totally lost, and convulsions often take place on the sound side. The muscles of the affected side of the face being relaxed, give those of the opposite side an appearance of being drawn up or contracted, and the patient having the power only of putting those in action on the *well* side, appears, on speaking, to elevate the corner of

* The exercise on the box of a carriage without springs is preferable to that of the inside of a carriage : but the nature of the disease should be well ascertained before such a remedy be employed, for if the disease arises from aneurism of the aorta, or any organic disease of the heart, such exercise will prove very hurtful.

the mouth so as to amount to a kind of grin or laughter, which is only owing to the muscles of the *opposite* side being in a relaxed state. The paralytic part often gradually decays, shrivels up, feels much colder than any other part of the body, and with a weaker action of the arteries.

CAUSES.—Palsy is the effect of an interruption to the flow of the nervous power from the brain into the organs of motion, in consequence of compression or poisons. Of the compressing causes, distension of blood vessels, effusion of blood or serum, or tumors, are the principal. Of the poisonous, lead is the chief. It is often produced by the division of a principal nerve; and sometimes, but very rarely, it is the consequence of extreme debility.

TREATMENT.—When it is produced by compression of the brain, from distension or effusion, the paralytic numbness is only symptomatic of apoplexy, and as such should be treated. (See *Apoplexy*). If, however, the palsy continues *after* the compression of the brain is evidently removed, it should be treated as local palsy, by external stimulants, as friction with flannels, or mustard flour, and blisters. Electricity, so much recommended for paralytic affections, by stimulating the brain and sanguiferous system, is a dangerous remedy, and may, by producing a determination of blood to the head, occasion a fatal recurrence of apoplexy*. The organs of digestion should be invigorated by such stimulating medicines that will not, at

* This effect of electricity is by no means unfrequent. I have known several instances of apoplexy immediately to follow the application of electricity; and when palsy is the sequel of an apoplectic fit, this stimulus should never be employed.

the same time, increase the action of the heart and arteries ; for this purpose a small tea-spoonful of powdered Jamaica ginger, No. 49, may be taken twice or thrice a day, or a pill of two grains of cayenne pepper. The peristaltic motion of the bowels should be kept up by taking five or ten grains of the aromatic pill twice a day, or, in such quantity as to produce *one* stool every twenty-four hours. A seton in the nape of the neck, particularly if the patient be affected with giddiness, will afford considerable relief, and should not be neglected. The food should be nutritious, but taken in moderate quantities, and flannel worn next the skin. If it arises from the compression of a tumor, its removal, if practicable, is first necessary ; the health of the part afterwards will be easily recovered by local stimulants and friction. If the lower extremities be affected with palsy, a seton should be applied to the loins, over the back bones, whether any distortion or disease can be discovered in the bone or not ; and if either such cause exist, it should be applied over, or on each side of it. As these causes are of a scrofulous nature, the alterative remedies recommended for scrofula should also be employed. When palsy is confined to a muscle or a limb, the topical application of electricity and a blister, will prove serviceable. When it is produced by poison, the part should be stimulated by electric sparks, mustard poultices, and the mixture, No. 74, or 71, taken as there specified.

Sumach has lately been recommended by Dr. John Alderson as a remedy for palsy. The Doctor, in a treatise on its virtues, relates several desperate cases of palsy, in which it proved successful. A grain of the powder is directed to be taken in any convenient vehicle twice a day,

and to be gradually increased to three grains twice aday. From the account given of it by Dr. Anderson, it appears to have effected more in the cure of palsy than has ever been ascribed to any other remedy, and such as justly entitles it to the attention of the *medical profession*. It is worthy of notice, that on the continent it has been considered a powerful poison, and therefore should be given with great caution. In one of the cases, the dose was increased to ninety grains night and morning, and in some it appears that even two grains produced pain in the stomach and bowels, and considerably deranged the nervous system.

We often meet with general debility of the nervous system brought on by over exertion of the body and mind, and by frequent intoxication, to which we cannot give any other name than palsy. The species is generally aggravated by stimulating or tonic medicines. The use of the Epsom salts as directed page 9, to prevent costiveness, and the spirit of nitre as recommended page 15, I have found most beneficial—as the mind is also much affected, the directions for its management, given under the head of the Hypochondriacal Affection, are also necessary.

When the cause of palsy is not clear, the treatment recommended for indigestion should be adopted.

PECTORAL ANGINA.

This disease passed unnoticed, by practitioners, till the late Dr. Heberden published a description of it nearly forty years ago ; and although it is by no means rare, it is little understood by the physicians of the present day. It is evidently of a spasmodic nature. It attacks in paroxysms, which are readily excited both by bodily exertions and mental agitation. When brought on by walking, the fit

will often instantaneously cease on standing still ; but after it has continued some time, it will attack the patient, not only on walking, but also on lying down, with such violence as to oblige him to rise up immediately in order to prevent suffocation. The fit commences with an acute pain beneath the lower part of the breast-bone, attended with a sense of constriction. The pain inclines rather to the left side, and often extends to the left arm, accompanied with great anxiety, difficulty of breathing, and a sense of suffocation. The late Dr. Fothergill observes, that *a sharp constrictive pain across the chest is the characteristic symptom of this disease.* No age is exempt from it. It attacks men more frequently than women, and particularly the short necked, the corpulent, and sedentary.

CAUSES.—In young people this disorder probably arises from nervous irritability of the heart or internal muscles of the chest ; but, in elderly people, this state is generally accompanied with some *organic* disease of the heart, or the coronary arteries*.

TREATMENT.—Our object in the treatment of this disease, is to diminish the excitability of the nervous system, and to moderate the action of the heart. It will be necessary to apply a blister over the breast-bone, and to keep it open for some time, by dressing it with the savin ointment, and to obviate costiveness by the use of the Epsom salt, as directed No. 2 page 9. ; after which two of the

* A few months since I attended, with Mr. Charles Bell, to examine the chest of a gentleman who died suddenly of this disease. The coats of the coronary arteries were so diseased as nearly to obliterate their cavity. The heart was also preternaturally large and flaccid.

following pills, taken two or three times a day, will prove very beneficial :

Take of the flowers of zinc, two scruples ; extract of hops, one drachm ; extract of henbane, one scruple ; oil of mint, twenty drops. Mix, and divide into thirty pills.

If the paroxysm be violent, about thirty drops of ether, and ten of laudanum may also be given immediately on its attack. If the patient be young and of a plethoric habit, the loss of blood will also be necessary. The diet should be light and free from every thing of a stimulating nature, as spices, wine, spirit, and fermented liquors. He should take great care never to overload the stomach, or to use any kind of exercise immediately after meals, and carefully to guard against any emotion of the mind. As corpulence is a predisposing cause of the disease, the patient should endeavour to avoid it by exercise, a spare diet, and the use of laxative medicines ; an issue in the arm will likewise prove very beneficial in this respect. Dr. Darwin and Dr. Macbride have published several cases of this disease, that were effectually cured by issues alone.

If the patient be emaciated, his countenance palid, and particularly if the legs swell in the evening, thirty drops of the ethereal tincture of steel, in three table-spoonfuls of the infusion of rhatany root or Columbo, will afford great relief. This case being attended with such great debility of the system, it is scarcely necessary to observe that an issue or blister is improper.

OF PILES.

This disease consists in one or more tumours, situated sometimes externally and sometimes within the verge of the anus, for the most part attended with a discharge of

blood. When there is no discharge, it is termed *blind piles*; and when the discharge is only serum, *white piles*. This disease, at first, is generally local; but by frequent occurrence, the constitution becomes so habituated to the discharge, that at length it becomes constitutional; in which case it is preceded by head-ach, stupor, giddiness, and other symptoms of fever, with a sense of tightness or fulness, heat and itching, and a sense of dragging down about the anus; or otherwise symptoms of indigestion, as flatulency, acidity in the stomach, &c. often attended with spasms. Sometimes the inflammation of one tumor runs so high as to terminate in the formation of matter, and thus produce the sinous ulcer termed fistula.

CAUSES.—This disease may be occasioned by whatever interrupts the free return of blood from the rectum; such as a collection of hard fæces, or an impregnated or enlarged womb. It is sometimes produced by irritation; hence aloes, or the pills advertised under the title of Scotch pill, are very apt to excite piles by irritating the rectum. The piles are sometimes the effect of relaxation and debility, and I believe not unfrequently arise from an inflammatory action in the rectum, and a diminished secretion of mucus from its inner membrane.

TREATMENT.—When *costiveness* is the cause, the electuary for the piles, No. 85, or the aperient sulphureous water, taken as directed, page 9, will remove it and quiet the parts. If after the due operation of either of these medicines, the disease should continue, the parts should be anointed with the ointment, No. 105. In case of much inflammation, general bleeding and the application of leeches to the part, will be necessary to prevent the formation of fistulous ulcers: and the patient should keep a

an horizontal position, and strictly observe a low diet. If irritation be the cause, the same mode of treatment should be pursued, with the occasional use of laudanum, No. 31. And if it be the consequence of relaxation, the tonic mixture, No. 77, and the application of a decoction of oak bark (made by boiling half an ounce of the bark in a pint of water, for about ten minutes) should be frequently applied to the part. *Astringent* and *cold* applications to the part should, however, be employed with great caution, and not without the advice of a surgeon, as apoplexy has followed the sudden dispersion of piles.

If the discharge of blood in either case be *considerable*, the patient should be kept quiet, and in a reclining position. He should make use of a *cold* diet, and avoid stimulants, and external heat.

When the constitution has become habituated to the disease, and the parts suffered much from its frequent occurrence, stimulants, as pepper, and ginger, taken with the aliment, often afford considerable relief. A stimulating electuary, known by the name of Dr. Ward's paste, has been much puffed off, and even recommended by regular practitioners. The following is an exact copy of the Doctor's receipt for making the paste, as published by John Page, Esq. to whom he bequeathed his book of receipts :

Take of elecampane powder, two ounces ; sweet fennel seed powder, three ounces ; black pepper powder, one ounce ; purified honey, and brown sugar, of each two ounces. The size of a nutmeg to be taken two or three times a day.

Ginger powder, and black pepper, generally have a very salutary effect in piles, although attended with great irritation and even a degree of inflammation, which one would suppose, from their stimulating qualities, they would be

more likely to increase. Such medicines probably afford relief, by producing an increased secretion of mucus from the inner membrane of the great gut*, and by invigorating the hæmorrhoidal vessels, which, in cases of piles, appear much relaxed.

In *elderly* people piles are very frequently the consequence of some organic disease of the great gut, in which case the early advice of an experienced surgeon should be taken, as by topical management and the use of alterative medicines in the first stage, much serious mischief may be prevented. Indeed no disease can be more distressing than schirrous contraction of the rectum.

A scorbutic inflammation about the anus is very often mistaken for piles, by people who are unacquainted with the disease. This complaint is attended with a most troublesome degree of itching, and often an ichorous discharge. It soon yields to the following ointment :

Take of citrine ointment, spermaceti ditto, of each equal parts. To be well mixed together in a glass mortar, and rubbed over the affected parts two or three times a day. The solution of the Epsom salt, as directed, page 7, should accompany its use.

The parts are likewise subject to excrescences or warts, which are often mistaken for piles ; these may be removed by ligature, caustic, or the knife. The excision of them by the knife is preferable, on account of being more expeditious, less painful, and attended with no danger. The

* The application of stimulants to inflamed secreting surfaces has often a very happy effect, by producing the natural secretion of the parts, and exciting them to an healthy action. In the same manner, it is probable, aromatics prove serviceable in colicky, and even inflammatory attacks of the bowels.

daily ablution of the parts with cold water will afterward destroy the disposition of the skin to their formation,

The recurrence of piles will be best prevented by obviating costiveness, by proper management of diet, cold bathing, and general bleeding in full habits.

OF PLEURISY.

This disease is an inflammation of the membrane termed pleura, which covers the lungs, and lines the internal surface of the thorax. It is attended with the same symptoms as inflammation of the lungs, but generally in a slighter degree. The same mode of treatment, with respect to medicine, diet, &c. is to be pursued for the recovery of the patient. (*See Inflammation of the Lungs.*)

OF THE PUTRID SORE THROAT.

SYMPTOMS.—This disease, also termed malignant sore throat, commonly commences with alternate chills and heats, pain and heaviness of the head, a strong expression of anxiety in the countenance, and other symptoms of fever, which are soon succeeded by slight swelling of the throat, the tonsils becoming inflamed and tumid, which rapidly spread to the neighbouring glands. The fauces have a high florid, or bright crimson appearance, somewhat shining or glossy, and soon attended with whitish or ash-coloured spots, which increase rapidly, and terminate in ulcers, more or less superficial; the tongue at the same time becomes foul, and the breath exceedingly offensive. The feverish symptoms are much aggravated towards night, and accompanied with delirium. The disease gradually grows worse; and about the third day, the patient is affected

with nausea, griping, and dysentery (probably in consequence of the discharge from the ulcers passing into the stomach). There is commonly (especially with children) a partial or general crimson efflorescence of the skin, or an eruption of small pustules, which relieves the affection of the stomach and bowels; the early and kind appearance of which is therefore to be considered a favourable omen. It is highly infectious.

CAUSES.—This disease seems to be produced by a peculiar specific contagion. It affects all ages, occurs at all seasons, and prevails in all situations.

TREATMENT.—This species of sore throat is generally terminated by a natural course; the chief object of its medical treatment is therefore, in the first instance, to moderate the fever, in its progress, and to combat unfavourable symptoms. With the first view, a full dose of ipecacuan powder, as directed, No. 23, should be administered on its first attack; and after its due operation, the saline draught, in a state of effervescence, as directed page 28. If the emetic should not operate on the bowels, half an ounce of the Epsom salt, should be administered: but both emetics and purgatives should be employed with caution; for should they produce violent diarrhœa, (to which there is generally a great disposition), they will by reducing the strength of the system, tend to accelerate its fatal termination. On the contrary, if the fæces be black and offensive, and the patient's countenance and spirits improved by the evacuations, gentle purgatives will be very proper. The antimonial preparation, sold under the name of James's fever powders, which, in domestic medicine, is generally resorted to on the attack of *all* fevers, is a very dangerous medicine in this disease, and by re

ducing the vital powers, has been productive of the most serious mischief, many instances of which have been noticed by Dr. Monro, who states "that he has known it to have hurried many to their graves in a few hours." The early application of a blister to the throat, and the use of the acidulated gargle, No. 93, page 74, will tend much to abate the inflammation and the consequent ulceration. When the diseased parts begin to separate, the saline draught should be discontinued for the tonic mixture, No. 77, page 70, and the detergent gargle, No. 95, used instead of the astringent one. The patient should be supported with strong beef tea, and arrow-root jelly; and if incapable of taking a sufficient quantity by the mouth, the nutrient lavement, No. 99, page 76, should be injected three times a day. In case of violent purging, the anodyne clyster, No. 96, will be proper, or forty drops of laudanum may be added to the nutrient clyster; and if the patient be not able to swallow the bark mixture, two drachms of Peruvian bark powder may likewise be added. The room should be fumigated twice a day with the nitrous vapours, as directed page 100, which will not only prevent the spreading of the contagion, but being respired by the patient, will prove an auxiliary to the medicine taken by the mouth. The evaporation of the acetic acid, as advised No. 38, page 50, will in a small room, answer as well in destroying contagious effluvia; but for the purpose of inhaling, is by no means so efficacious as the nitrous vapours when diffused in the atmosphere. As this disease is highly contagious, the fæces of the patient should be received into a pot with some vinegar in it, and immediately conveyed from the house.

The spirits of the patient should be supported by inspir-

ing a confidence of recovery, and by keeping from him every thing that is likely to depress them, as funerals, passing-bell, the fatality of the disease in the neighbourhood, and particularly that of a friend. Even charms, says Dr. Falconer, might be used with good effect could we promote a strong prepossession of their efficacy, either by the confidence they inspire, or by their engrossing the attention of the mind, Aretæus, fully sensible of the necessity of supporting the strength of the system in general, and how much this depends on the spirits, expressly counsels the patient “to be of good heart, and advises the physician to entertain him with such discourse as might tend to encourage his hopes of recovery.” Hope and confidence are as necessary for the prevention as cure of contagious fevers. It is scarcely necessary to observe, that the advice of the most able and experienced practitioner should be solicited on the first attack of this disease, while medicines may be administered with greater probability of success.

OF RHEUMATISM.

This disease commonly occurs in autumn and spring, and seldom in winter or summer, unless the vicissitudes of heat and cold be sudden and frequent. When it is attended with fever, it is called *acute* or *inflammatory rheumatism*; and when there is no fever, *chronic rheumatism*.

Of the Acute or Inflammatory Rheumatism.

SYMPTOMS.—This species commences with the usual symptoms of fever, accompanied with pain, swellings, and redness of the joints, generally of the knees, hips, ankles, shoulders, elbows, and wrists, while the smaller joints of

the toes and fingers are seldom affected. The *fever* rarely continues violent more than *fourteen* days, although sometimes the *pain* keeps shifting from one joint to another for some weeks. The pain and sometimes the fever is much increased in an evening, and the former during night is often acute. As the pains become fixed the fever generally abates.

CAUSES.—It is produced by exposure to cold, when the body is unusually warm, or by its *partial* application, or from a *continuance* of cold, as wet clothes, &c.

TREATMENT.—The first object in the cure of this disease, is to abate the constitutional fever; for as long as the febrile symptoms run high, all topical applications will prove unavailing. For this purpose, particularly if the patient be of a plethoric habit, general blood-letting will be proper, and afterwards the occasional exhibition of the aperient mixture, No. 62, page 67, or either of the neutral salts, as directed No. 2, page 7, after the due operation of which, the antimonial febrifuge powder may be exhibited as directed No. 37, page 49; or if the pain be very severe, the following draught at bed-time:

Take of tartarised antimony-wine, No. 16, thirty drops; liquid laudanum, No. 31. fifteen drops; camphorated julep, No. 28, one ounce. Mix.

Half a pint of *weak* white wine whey should be taken in about an hour after this draught, to promote its sudorific operation, and the mixture, No. 63, page 68, taken every four or five hours during the day-time, in order to keep up its effects. The draught may be repeated every night till the symptoms are considerably abated. If the inflammation runs high, the application of six or eight leeches to the part will be necessary. When the fever is abated, and

the pains; become fixed, the parts should be well rubbed with the volatile liniment, No. 103, page 77, or opodeldoc, No. 5. In case the pain and inflammation continue obstinate, the use of the warm bath once in twenty-four hours, and blisters to the parts affected, will prove powerful auxiliaries to these remedies.

Opium, in the dose of one grain three times a day, is much extolled by Dr. Pearson, as a remedy for acute rheumatism, and in general it proves very successful; but the loss of blood, and the use of aperient medicines, should be premised. Exposure to cold should be avoided, and a low diet observed. Common whey, taken warm, affords an excellent medicinal beverage.

Electricity is a very popular remedy for chronic rheumatism complaints; but for this species, by increasing the fever, it is uniformly hurtful. It should, therefore, never be employed till the complaint becomes of a chronic nature.

Of Chronic Rheumatism.

SYMPTOMS.—When the febrile symptoms, together with the swelling and redness of the joints attendant on the *acute* species, have entirely abated*, and the pain still continues to affect certain joints with stiffness, or uneasiness of motion, on change of weather, the disease is termed *chronic rheumatism*, which often continues a length of time. The joints most surrounded by muscles, and the parts that suffer much by bodily exertion, as the hip and the loins, are commonly the seats of this complaint. When it affects the hip joint, it is named *Sciatica*; and when situated in the loins, *Lumbago*.

* The period of *acute* rheumatism, seldom or ever exceeds forty days; after which, if the pain continues, it may be pronounced *chronic*.

CAUSES.—It is supposed to arise from a loss of tone in the muscular fibres and blood-vessels of the part affected.

TREATMENT.—The indications of cure are exactly opposite to that of the *acute* or *inflammatory* species; the latter being attended with an *increased* action of the system, and the chronic with a *diminished* one. The energy of the parts affected should be roused by stimulants, as electric sparks, the volatile linament, No. 103, with friction, and the application of flannel. If these means prove ineffectual, the application of a blister, or the following stimulating plaster, will be necessary :

Take of gum plaster, one ounce ; blistering plaster, quarter of an ounce ; gum euphorbium, one drachm. To be mixed with as little heat as possible, and spread on leather.

The *hot* bath may likewise be employed with advantage.

These external applications should be assisted by the internal use of the anti-rheumatic mixture, No. 71, as there directed, to which a drachm of the essential salt of bark, or extract of rhatany root, may be added, in case of much debility of the system : a little of the farina of the Jamaica ginger may likewise be taken in the common drink. The diet should be generous, and the common beverage the spirit of juniper (commonly called gin), diluted with water.

If the disease be attended with emaciation of the body, and particularly with an exacerbation of pain in the evening or during night, two of the following pills may be taken twice a day, with a quarter of a pint of the compound decoction of sarsaparilla :

Take of prepared calomel, twelve grains ; gum guaiacum, one drachm ; extract of poppies, half a drachm ; golden sulphur of antimony, one scruple. Mix, and divide into thirty pills.

The compound decoction of sarsaparilla, No. 118, page 81, should be taken to the extent of a pint a day. A de-

coction of the leaves of the oleander or rosebay, in the dose of a wine-glassful three or four times a day, has been strongly recommended as a remedy for *chronic* rheumatism. This decoction is made by boiling half an ounce of the leaves in a pint of water till one fourth is consumed. It will be adviseable to begin with a smaller dose at first, and gradually increase it a wine-glassful.

The use of distilled water in every article of diet, and as the principal beverage, is much recommended by Dr. Lambe; and I am well persuaded will prove of the greatest advantage in the cure of both acute and chronic rheumatism: in the latter case, a little of the spirit of juniper may be added. A clergyman of great respectability at Bath, with an obstinate rheumatic affection of the extremities, nearly approaching to a state of palsy, derived more advantage from the use of this water, than either the Bath waters, warm bathing, or stimulating medicines; and by due perseverance in its use, is now able to walk five or six miles with ease, after being confined to his house two or three years.

Rheumatism is an affection of the nerves, and often occurs in persons whose general health is good. One office of the nerves is to conduct animal electric matter from the brain. Rheumatic pains may be occasioned by some interruption to this electric matter, in consequence of a diseased, or collapsed, or contracted state of the nerve, or by a state of skin, which do not sufficiently conduct the electric fluid to the atmosphere. Hence friction, by producing an equal distribution of the animal electric matter, favours the escape of its superabundance to the air. With these views I have recommended a brush, with metallic wires distributed through the hair, and terminating in the handle,

for the purpose of more effectually conducting it from the body. This brush, in cases of local pains, whether rheumatic or gouty, and nervous head-aches, I have lately found more efficacious than liniments, or any external application. In acute pains it often affords immediate relief; for head-achs, either rheumatic or nervous, its effects are instantaneous. When we consider that the most important office of the brain, is to supply the animal body with electric matter, we cannot be surprised, that people should suffer local pains by change of weather. The brain likewise, is often rendered too excitable by the mind, or irregularity of our mode of living, hence the body becomes surcharged with electric fluid, producing confusion of mind, an increase of the heat of the body, and derangement of the various functions. The state of the brain and nerves, in the treatment of all diseases, and particularly those of the nervous class, demands the greatest attention. The electrical brush is therefore a very valuable invention*.

PREVENTION.—Cold bathing, and the use of flannel next the skin, are the most effectual means of preventing the recurrence of both chronic and acute rheumatism.

DISTINCTION.—Rheumatism may be distinguished from gout, by not being *preceded* by pain in the stomach, symptoms of indigestion, and cramp of the extremities; by being seated in the *larger* joints, while the gout affects principally the *smaller* joints; occurring at an earlier period of life: *not* being *hereditary*, and in general can be traced to some exciting cause, particularly the action of

* These brushes may be obtained of Mr. Butts, No. 10, Berners-street, Oxford-road.

cold. It is exceedingly difficult to distinguish rheumatic pains from those produced by deep-seated inflammation, and from such mistakes the most serious consequences often arise, particularly when seated in the loins or hip-joint; the stimulating applications, as electricity, &c. employed for the cure of rheumatism, increasing the inflammation, and occasioning extensive suppuration, which generally terminates in the death of the patient. Such mistakes have happened even in regular practice; and through the imprudent use of quack medicines, such terminations are very frequent*. That obstinate, and generally fatal disease, the lumbar abscess, begins with pains in the loins, resembling lumbago; the only chance the patient has of recovery, in such case, is the prevention of the formation of matter; in all *doubtful* cases, therefore, the application of a blister, cupping, and the use of the following diaphoretic medicine should be employed, instead of the *stimulating* plan recommended for chronic rheumatism:

Take of camphorated julep, No. 28, five ounces; Mindererus's spirit, No. 10, three ounces; sweet spirit of nitre, No. 15, three drachmas.
Mix. Three table-spoonfuls to be taken every four or five hours,

OF RICKETS.

This disease is peculiar to infancy, seldom appearing after the third year, or before the ninth month, but generally in the intermediate time. The first symptoms are an enlargement of the head, face, and belly; while the other parts of the body diminish in bulk, except the joints of the

* The indiscriminate use of spirit of turpentine, sold under the fictitious title of Essence of Mustard, it is to be feared, has been productive of much serious mischief in *acute* rheumatism, or deep-seated inflammation.

hands, arms, knees, and feet, which become irregularly tumified ; the bones lose their solidity, so as to give way to the weight of the body ; hence those which are employed for that purpose, as the legs, thighs, and back-bone, become crooked and distorted, and the child of course walks with more and more difficulty, and sometimes it entirely loses the use of its feet. The veins of the neck, and those that surround the large joints, are generally much distended, while those on other parts of the body appear in a diminished or contracted state ; the countenance is lively, the cheeks full, and often florid, and the faculties of the mind sometimes impaired, but more frequently it possesses a premature acuteness of understanding. As the disease advances the sides of the chest become flattened the breast-bone elevated, often in a point, and the ends of the ribs knotty ; the teeth generally come forward at a late period, and soon turn black and decay, or become loose and fall out ; the pulse is quick and feeble ; the appetite sometimes good, but the digestion evidently bad, being frequently attended with flatulency and a vomiting of an acid matter.

This disease seldom proves fatal, unless fever and consumption of the lungs supervene ; but after the fourth or sixth year, the child generally gains strength, and the bones of the legs, although very crooked, often become straight as the child grows, while the distortion or the curvature of the back-bone frequently increases.

CAUSES.—From the frequency of this disease in marshy countries, a moist atmosphere has been noticed by medical writers as a *predisposing* cause. Some attribute it to bad nursing, the use of acescent food, and whatever may tend to debilitate the body ; others, with less probability, have attributed it to a scrofulous or venereal taint in the parents.

In those who have died of the disease, the mesenteric glands, the liver, and lungs, have been found enlarged, and the bones nearly destitute of the earthy matter which gives them firmness and shape.

Dr. Bobba of Italy, some time since, presented to the Medical Society at Paris, some ingenious remarks on the cause of rickets. It is well known, that the bones owe their solidity to phosphat of lime; he therefore ascribes the cause of rickets to a want of this substance; but whether the phosphat of lime is entirely wanting in the system, or the vessels destined for its disposition in the bones be too weak to perform their office, the learned Doctor does not take upon himself to determine. The source of rickets may be traced to some wrong action in the digestive organs, probably from unwholesome food, or want of the due exercise of the body; in consequence of which, the bile* is not secreted in sufficient quantity, a strong acid is generated, and the food not properly converted into chyle.

The acidity, which is formed both from animal and vegetable food (the nature of which has not yet been ascertained by any chemical experiment), no doubt enters the mass of blood, and there forms the uric acid. It is observed by Morgagni, Portal, and Pinel, that softness of the bones in adults generally occurs in gouty habits. Now it appears, by the experiments of Dr. Wollaston and Mr. Fourcroy, that the concretions deposited about the joints

* The pale appearance of the faces of ricketty children proves that the bile is not secreted in proper quantity; and the enlarged state of bowels, flatulence, irregular appetite, and acidity, indicate the disordered state of the digestive organs, and a wrong action to be going on throughout the intestinal canal.

of gouty persons are a calcareous earth combined with the uric acid. It is therefore presumable, that the uric acid has a greater affinity to the calcareous earth than the phosphoric acid, and that in consequence of which, the phosphat of lime deposited in the bones, is taken up into the circulation by the absorbent vessels, and either deposited in some other part of the body, in which there may be a morbid action, or preternatural determination, or separated from the blood by the kidneys, and conveyed from the body by the urinary passage, which the urine of people affected with the gout confirms. Gravel and stone may likewise be thus formed, for their analysis has proved that they are composed of the uric acid and calcareous matter.

TREATMENT.—The first object to attain towards the cure of this disease is, a proper digestion of the food, for which purpose it will be necessary to clear the first passages by an emetic of ipecacuan powder, as directed No. 23, and to empty the intestinal canal by an active dose of calomel, No. 34, or the basilic powder, No. 36 ; after which a dessert or table-spoonful of the following mixture may be given three times a day :

Take of extract of the rhatany root, one drachm ; dissolve in lime water, six ounces ; then add, tincture of cardamom seeds, half an ounce.

If the fæces should continue pale after this medicine has been taken a week, a grain of calomel should be given every, or every other night, in a little currant jelly or sugar ; and if the bowels should not be relieved twice, or at least once a day, the basilic powder should be repeated. The alterative dose of calomel should be continued every other night for a week, or till the stools become of a proper yellow appearance.

After the disordered state of the digestive organs is corrected, cold bathing may be employed with the most decided advantage.

If notwithstanding these remedies, an acidity continues to prevail in the stomach, which is frequently the case, the emetic of ipecacuan powder should be repeated, and the patient should, besides the mixture, take the prepared natron, as directed No. 60, and when the symptoms of indigestion have subsided, the mixture need not be taken more than once a day (about an hour before dinner). The limbs, and even bowels, should be well rubbed every night and morning with the flesh-brush, flannel, or the warm hand.

If the bones of the lower extremities be much curved, they should be supported by instruments, so made as to take off the weight of the body, by sustaining the pelvis, and at the same time to produce a slight pressure on the *distorted* parts of the bones. Several plans of instruments have been recommended for this purpose, but those invented by Mr. Sheldrake, of the Strand, are certainly the most serviceable, and least inconvenient to the child. If the child be a female, great care should be taken that the instrument does not compress the bones of the pelvis. Many a case of distorted pelvis has no doubt been produced by the pressure of improper instruments on these bones. Some practitioners discountenance the use of instruments in the curvature of the bones of children; but as they cannot produce mischief when properly made, I think it would be more prudent to employ them, when the bones of the legs or thighs evidently give way—For mere enlargement of the knees they are certainly unnecessary.

The phosphat of lime is much recommended by Dr.

Bobba, of Italy, and it appears has in a few instances been successfully employed in this country. Before its exhibition, it will be necessary to correct the state of the stomach and bowels by an emetic of ipecacuan, and the mixture of extract of rhatany root; from inattention to such preparatory treatment, it is probable that this medicine has failed in the practice of some practitioners; for the acidity which forms in the stomach of ricketty children, will assuredly decompose it, and render it inert. The phosphat of soda, noticed page 8, under the head of Epsom salt, may likewise be taken every morning, as directed for the Epsom water, page 7. The muriate of lime is also recommended as a remedy for rickets; it may be taken as directed for scrofula.

The phosphoric tincture, and the oxyphosphat of iron, are very valuable remedies in the advanced stages of rickets. The former is given in the quantity of six to twelve drops twice a day in a little water; and the latter from two to three grains twice a day with a little sugar, or made into pills with conserve of hips.

The Peruvian bark has been much recommended as a strengthening medicine; but instead of producing such effect, I have uniformly found it disagree with the bowels, and increase the difficulty of breathing. The use of issues in cases of rickets, recommended by some authors, is much to be doubted. The discharge cannot be beneficial, but by increasing the debility of the frame, is very likely to prove injurious; they are at any rate too ambiguous a remedy to employ in domestic medicine.

Exercise being of great importance in the treatment of rickets, the child should be well tossed in the arms of an athletic nurse, and when she is tired, it should be put to

roll and stretch its limbs on a carpet, instead of being rocked to sleep in a cradle, or put to sit and amuse itself with toys. A lively nurse that will do her duty out of the sight of the parents as well as in it, will be of much greater service in establishing the health of a ricketty child, than all the medicine that can be recommended by the most skilful physician. Nothing strengthens the digestive organs of children more than exercise, and if they have not their due share of it, indigestion and other diseases will be the certain consequences*.

The diet of ricketty children should consist of a proportionate combination of animal and vegetable food, such as broth, chicken, veal, and bread or rice pudding; and the animal and vegetable jellies, as those of arrow-root, sago, and hartshorn shavings, as directed page 96, and the beverage chiefly pure water. A tea-cupful of good fresh milk, with a table spoonful of lime water, given two or three times a day, is very beneficial in this complaint.

Malt liquor, wines of all sorts, vinegar, tea, and unripe fruit, should be particularly avoided.

If the child is affected with difficulty of breathing, or is very weakly, flannel should be worn next the skin.

OF RUPTURE.

This complaint consists in the protrusion of some part of the contents of the belly, forming a soft compressible tumour, generally occurring in the groin.

CAUSES.—Whatever diminishes the cavity of the belly,

* It is worthy of notice, that in manufacturing towns, where mothers do not allow themselves time to exercise their children ricketty complaints are most prevalent.

by forcing the bowels out of their natural situation, will produce this disorder, such as excessive laughing, sneezing, an impregnated womb, and sudden and violent exertions. The fashion of wearing the waistband of the breeches high up, and tight round the waist, by pressing down the bowels, is one cause of the unusual frequency of ruptures in England of late years.

TREATMENT.—All that can be done towards the cure of a rupture is, to replace the prolapsed parts into the cavity of the belly, and to prevent them from slipping out again; the surgeon has then done his part, and the rest is nature's. For the purpose of retaining the bowels in their proper situation, different bandages are employed, according to their seat. When situated in the groin, or scrotum, an instrument termed a truss, has generally been applied; which, if not properly constructed, by producing an *unequal* pressure over the aperture through which the bowels protrude, will occasion much mischief, by suffering a small portion of the bowels to get between the pad and the bone, so as to be pinched or contused. To obviate such a serious occurrence, several improvements have lately been made on the common truss, by which, from the length, and peculiar formation of the pad, and by means of regulating springs, an equal pressure is produced, and the descent of the bowels effectually prevented. In consequence of the elasticity of the *circular* spring, its use is attended with no inconvenience in walking, or any exercise; and at the same time admitting of a rotatory motion, the pad is not displaced by any position of the body*. When the body is in

* This truss termed the "Self-adjusting Truss" is the invention of Mr. Salmon, of Gerrard-street, Soho.

an *horizontal position*, (as during bed-time) the use of a truss is not necessary. The bowels should likewise be supported by means of drawers, with a wide waistband.

Costiveness and flatulence should be carefully guarded against, by taking occasionally a table-spoonful of the bitter tincture of rhubarb, and by avoiding much vegetable food and fermented liquors.

When the contents of the tumour cannot be returned, and attended with much pain in the part, or in the bowels, nausea, vomiting, restlessness, fever, and no discharge by stool, a strangulation of the protruded parts may be suspected, in which case surgical aid should be procured without delay, the life of the patient being endangered by approaching inflammation; and if the confined parts be not soon liberated, mortification and death will probably ensue.

OF ST. ANTHONY'S FIRE, OR ERYSIPELAS.

The plethoric and young are most subject to this disease; and after being once afflicted by it, are very liable to future attacks.

SYMPTOMS.—It comes on with cold shiverings, and other symptoms of fever; the hot fit is generally attended with great affection of the head, as drowsiness, confusion, and often delirium. The redness of the skin appears after the first or second, and sometimes the third day of the fever, generally on the face, gradually spreading over the neck and scalp of the head, which become turgid, and the eyelids often so swelled as to close the eyes entirely. The redness is attended with considerable heat, and disappears on slight pressure of the finger, but quickly returns on removing. Soon after, blisters of larger or smaller

sizes commonly appear, containing a clear watery fluid, of so ichorous a nature as to inflame the skin over which it is discharged. Sometimes the inflammation first appears on the legs, which are apt to become considerably tumified. The disorder increases for two or three days, and continues at its height for two more, when it abates, and soon terminates in a falling off of the diseased scarf skin, in large scales ; but sometimes the delirium increases, and inflammation of the brain intervenes, which, about the seventh, ninth, or eleventh day, often ends fatally.

CAUSES.—The predisposing cause of this disease is a preternatural saline state of the blood, in which case, sudden exposure to cold, particularly when the body is hot, or in a state of perspiration, will put the disease into action. Tissot observes, that the superficial inflammation of the skin is occasioned by an irritation of an acrid sharp humour, not duly discharged by perspiration.

Dr. Darwin is of opinion that it is not a primary disease, but that it arises from torpor, or inflammation of some internal and distant membrane, as of the stomach, liver, kidneys, or more commonly of the brain, which the learned author thinks is confirmed by the inflammation changing its situation, and liable to return at certain annual or monthly periods. Dr. Cullen supposes it to depend on a matter generated within the body, and in consequence of fever thrown out on its surface.

TREATMENT.—When the brain is not, or but slightly affected, this disease is not attended with danger, and requires only the occasional use of the aperient mixture, No. 62, with twenty drops of antimonial wine, No. 16, at bed-time, in a little *weak* white wine whey. The diet should be low, and the drink chiefly barley-water, acidu-

lated with tamarinds. But when the head is much disordered, the feet should be put into warm water for ten or fifteen minutes, and a blister applied to the nape of the neck. If these fail to afford relief, and the person be of a plethoric habit, the loss of eight or ten ounces of blood from the arm will likewise be necessary. If, notwithstanding these remedies, the affection of the brain should increase, and the patient become delirious, the head should be shaved, and a large blister applied to the scalp, and mustard poultices to the feet. The fever attendant on this disease, especially when it occurs in autumn, is often of a putrid nature, and instead of lowering the system, may require an opposite treatment; when, therefore, it is attended with an affection of the head, medical advice should always be resorted to, the life of the patient being certainly in a very critical situation.

The prepared ammonia, in the dose of five or six grains two or three times a day, dissolved in water, has lately been much recommended by Dr. Peart, and it appears in many instances has proved very beneficial. The decoction of Peruvian bark, with the diluted vitriolic acid, is directed by some eminent practitioners from the commencement of the disease; but the propriety of administering such medicines must depend on the attendant symptoms. If there be considerable determination of blood to the head, and symptoms of inflammation of the brain appear, no experienced practitioner would venture on their exhibition. When this disease proves fatal, it is generally by attacking the brain; the object of practice is, therefore, to check the velocity of the blood to the head, and to quiet the system, and particularly the mind; the symptoms of putrid fever, which so often attend the latter stage of the disease, or ap-

pear a few days before the dissolution of the patient, are merely symptomatic of the affection of the brain.

The diet should be low, and consist principally of vegetable jellies; wine and stimulants should be avoided, unless the debility, or sinking state of the patient indicates their use.

Great caution is necessary in the application of external remedies; as by the imprudent use of repellents, inflammation of the brain has been produced. Fine oatmeal may be sprinkled over the parts, for the purpose of absorbing the discharge; but in case of much heat and dryness, cabbage leaves (stripped of the stems) softened before the fire, or by immersion in boiling water, will answer best.

In people predisposed to erysipelas, from a preternatural saline quality of the blood, inflammatory complaints generally run high; local inflammatory affections of secreting surfaces, whether from inflammation or relaxation, prove very obstinate, as gleets, fluor albus, catarrh, inflammation of the eye and throat, rheumatism and gout. In ladies of such constitution, fluor albus particularly, is often attended with a degree of inflammation, which might induce an unexperienced practitioner to suspect it to be of a specific nature. Medical men cannot therefore be too cautious in giving a decided opinion in such cases. The most efficacious medicines for correcting the erysipelatous constitution, are the alterative pills and compound decoction of sarsaparilla, recommended for scrofula, page 371. which those subject to the attacks of the disease, would do right to take every spring and autumn, for a fortnight or three weeks. They will not only prevent the disease coming into action, but in the course of a few years entirely destroy the disposition to it.

Notwithstanding the great danger that always attends the use of external applications in this disease, empirics are bold enough to assert, that by the use of their lotions, it may be infallibly cured. I was some time since requested to see a patient, afflicted with this disorder, who, from the use of an advertised remedy, was attacked with inflammation of the brain; and had she continued its application one day longer, it would probably have cost her her life. I embraced the opportunity of analysing this *innocent* composition, as it was represented to be, which proved to be no less than a solution of corrosive sublimate of mercury combined with lead!

OF SAINT VITUS'S DANCE

This is a convulsive disease, principally attacking children from ten to fourteen years of age*. It first shows itself by a lameness, or rather unsteadiness of one of the legs, which the patient draws after him like an idiot. It afterwards affects the hand, on the same side, so that if a glass of liquor be put into it to drink, before the patient can get it to his mouth, he uses a great number of odd gestures, through the hand being drawn different ways by the convulsive action of the muscles, in consequence of which he is not able to carry it in a strait line; and as soon as it has reached his lips, he often throws it suddenly into his mouth, and drinks it very hastily, as if he only meant to divert the spectators. The will of the patient seems often to yield to these convulsive motions, as to a

* Dr. Rotheram observes, that he has seen this disease in a robust man of forty-two. This patient, after various ineffectual remedies had been used, was cured by strong electrical shocks, directed through the whole body.

propensity, and thereby they are often increased, while the person affected seems to be pleased with increasing the surprise and amusement which his motions occasion to the by-standers. It is sometimes accompanied by confusion of mind, and the patient labours often under an impediment of speech. Females are generally the subjects of this disease.

CAUSES.—From its generally attacking weakly people, it has been attributed to debility of the system. It arises from an increased excitement of the nervous system, which is often produced by some irritation in the stomach and intestines; such as worms, and sometimes by violent passions and perturbation of mind. In females, at the period of puberty, it probably arises from the same causes as hysterics.

TREATMENT.—As the stomach and intestines are always more or less disordered in this disease, the cure must be commenced by an emetic of ipecacuan powder, No. 23, and the following day a dose of the basilic powder, No. 36, after the due operation of which, strengthening medicines, combined with those that are known to allay nervous irritability, should be persevered in, such as the following mixture :

Take of essential salt of bark, No. 24, one drachm; dissolve in half a pint of water, then add tincture of Russian castor, three drachms; tincture of valerian, six drachms. Mix. Two table-spoonfuls to be taken three times a day.

If the complaint be attended with pain in the head, a blister should be applied to the nape of the neck, and the feet kept warm by the use of flannel socks.

When the symptoms are abated, cold bathing every morning will prove of great advantage; and with the use of the muriated tincture of steel, in the dose of ten or fifteen drops, in a glass of cold valerian and chamomile tea,

will probably complete the cure. The basiliac powder should be repeated two or three times a week till nine or twelve doses have been taken; for if it arises from worms it will effectually dislodge them; and if the stomach and intestines are in fault, which in ninety-nine instances in a hundred is the case, the frequent exhibitions of such a purgative will probably remove it. Irregular action of muscles is certainly connected with the state of the stomach and intestines, and Dr. Hamilton asserts, may be cured by frequent doses of cathartic medicines, many instances of which that very able and experienced physician has lately published. If this treatment fail of affording relief, the cure should be attempted in the manner directed for epilepsy.

In many cases electricity has proved of great advantage; but, in the majority, it has aggravated the symptoms, and when attended with head-ach or plethora, should never be employed.

The electuary of tin, recommended for the tape-worm, No. 86, has been successfully prescribed by Dr. Blount, of Hereford, and in all the cases I have known it administered, it certainly has proved beneficial in improving the general health of the patient and quieting the nervous system, which I attribute to its mechanical operation on the inner coats of the stomach and intestines, occasioning them to throw off redundant slime, and producing an healthy action in the mucous glands, and thus considerably promoting the health of the body. With this view I have lately given the granulated tin, in many diseases of children in which the stomach and bowels were disordered, with the most decided advantage. The diet should be regulated according to the strength of the patient: if ple-

thoric, a low diet should be observed, and wine and stimulants avoided. On the contrary, if the body be much debilitated, a nutritious diet should be employed; but even in this case, wine and stimulants should be allowed with great caution. Cold bathing, if it do not alarm the mind, will prove highly beneficial, and in two instances I have known it succeed after all other means proved ineffectual.

The acetated ceruse is also a very valuable remedy for this disorder, given with a tonic medicine, in the following form:

Take of acetated ceruse seven grains; extract of rhatany root two drachms; dissolve in eight ounces of water, and add tincture of cardamom seeds six drachms. Two table spoonfuls to be taken three times a day.

The acetated ceruse is a very powerful medicine, and should in no case be employed internally, without the attendance of a practitioner in medicine.

OF SCALD HEAD.

This disease is of a contagious nature. It is often communicated by a change of hats at schools, and in families by the use of the same comb. The whole of the hairy scalp is subject to it, but, on close inspection, it will appear more virulent at the roots of the hair. The discharge is often so acrimonious as to cause swellings of the lymphatic glands of the neck. It is sometimes dry, and at others moist.

TREATMENT.—On the *early* appearance of this disease, it will only be necessary to cut the hair short in the places affected, to remove the scabs, and rub a little of the following ointment well over the parts:

Take of the citrine ointment, three drachms; olive oil, one drachm.
Mix in a glass mortar.

When the disease has been neglected, and the scalp much affected, the shaving of the head will be requisite; after which it should be well washed with a strong solution of soap in water, till the scales and matter be entirely removed, when the following ointment should be *well* rubbed over the parts every night and morning, by means of a piece of soft leather :

Take of the citrine ointment, and pitch ointment, of each half an ounce. To be mixed in a glass mortar.

This ointment should be removed every morning, by first rubbing over the scalp some olive oil, and afterwards by washing it with soap and water, by means of a piece of flannel. If any part appear more diseased than another, the hair should be pulled out by degrees, the roots being affected. During the use of this ointment, a cap made out of a bladder should be worn. After the virulence of the disease is abated, the cure may be completed with the citrine ointment and olive oil, as above directed; and even after it has entirely disappeared, it will be necessary to wash the scalp once or twice a day with a strong solution of soap, or a decoction of tobacco, till the hairs begin to grow on the parts, which may be considered a proof of the disease being destroyed. If fresh scales should continue to form, the application of ink will complete the cure.

When this disorder occurs in a scrofulous habit, it is generally extremely difficult to cure. In such case it will be necessary to correct the scrofulous diathesis of the system by the remedies recommended for scrofula, of which the prepared natron and compound decoction of sarsaparilla are the most efficacious. The internal use of mer-

cury, there recommended, will not, however, be necessary, if the citrine ointment be well rubbed over the scalp.

Although the general opinion is, that this disease is confined to the scalp, I conceive it will, in all cases, be proper to attend to the general health, and particularly to the digestive organs of the patient; and to guard against acidity in the stomach, by the use of the prepared natron, as directed No. 60. If the stomach be disordered, an emetic of ipecacuan powder, No. 23, and a full dose of the basilic powder, No. 36, will be necessary, and afterward thirty or forty drops of the tincture of columbo may be taken in the solution of prepared natron, as directed, No. 60; but if the patient be of full habit of body, the solution of Epsom salt, or the sulphureous saline water, as directed, page 8, will answer best.

The diet should consist of a proper proportion of vegetable and animal food, and pure or distilled water used for the common beverage.

OF SCARLET FEVER.

SYMPTOMS.—This fever begins with chilliness and shiverings; soon after which the whole skin becomes covered with red spots, *more numerous, larger, and redder*, than those of the measles. In two or three days they disappear, succeeded by scalings of the skin, like bran dispersed over the body, which fall off and appear again two or three times successively.

TREATMENT.—This disease is generally so mild as to require nothing more than to observe a low diet, and to avoid a cold air and cold drink. If the body be costive, a dose of the aperient mixture, No. 62, or powdered jalap, No. 27, may be taken and repeated occasionally; and if

the feverish symptoms run high, the saline mixture, No. 78, may likewise be taken every two or three hours, in the dose of a tea-cupful. Barley-water, acidulated with tamarinds, or lemon juice, affords the best beverage. If attended with much pain in the head, or a sense of heaviness or stupor, a blister should be applied to the nape of the neck, and the feet immersed in warm water. When it is accompanied with more malignant symptoms, its tendency is always to the putrid kind of fever, attended with ill-conditioned ulcers in the throat; in which case the same treatment as already recommended for putrid sore throat will be requisite.

OF SCIATICA.

When rheumatism attacks the hip-joint, or the great nerve of the thigh, it is thus termed. When attended *with fever*, it will require the treatment recommended for the *acute* rheumatism; and when fever is *entirely* absent, it is to be considered of the nature of *chronic* rheumatism, and as such treated.

OF SCURVY.

The diseases of the skin, generally termed scurvy in this country, are considered under the head of "*Eruptions of the skin.*" In the true scurvy there is a general disposition in the body to putrefaction, which takes place in different parts. It does not appear to be contagious, and more frequently occurs in cold climates than in warm ones. Sailors, and such as are shut up in besieged places, are generally its subjects. It is characterized by extreme debility of the system, a pale and bloated complexion, spongy gums, livid spots on the skin, offensive breath, œde-

matous swelling of the legs, foul ulcers, fetid urine, and extremely offensive stools; the pulse is small, frequent, and, towards the last, intermits. This disease, in its last stage, exhibits a most lamentable and wretched appearance; with considerable aggravation of the above symptoms, the joints becoming swelled and stiff, the tendons of the legs rigid and contracted, general emaciation, bleeding at different parts of the body, the stools extremely fetid, at length violent purging or dysentery comes on, and soon terminates the tragic scene.

CAUSES.—This disease arises, in the first instance, from the want of fresh provisions, and a due quantity of vegetables; probably assisted by the prevalency of cold and moisture, and such other causes as depress the nervous energy, as indolence, confinement, neglect of cleanliness, much labour and fatigue, sadness, despondency, &c. A preternatural saline state of the fluids is assigned by Dr. Cullen as its proximate cause. It seems to depend more on a defect of nourishment than on a vitiated state of the fluids. The reason that salted meat is so productive of scurvy, is, because it is drained of its nutritious juices, which run off in brine, and at the same time its fibres being hardened and rendered more difficult of digestion.

TREATMENT.—A diet of fresh vegetables, and a beverage strongly impregnated with the juice of lemons, oranges, and the sub-acid fruits, are more efficacious in the cure of this disease than the most powerful antiscorbutic medicines. The essences of malt and spruce have likewise been found of great service, probably from the quantity of fixed air they contain. When lemon or orange juice cannot be obtained, nitre dissolved in vinegar, in the proportion of an ounce of the former to a

quart of the latter, has been found to afford the best substitute: water, acidulated with the nitric acid, is perhaps not less efficacious; from one to two ounces or more of the former may be given three or four times in the course of the day; and of the latter a quantity containing about fifteen or twenty drops of the nitric acid may be taken every five or six hours. The vitriolic acid, the Peruvian bark, and the red sulphate of iron, are likewise very valuable remedies in the far advanced stages of this disease.

The room or cabin of the patient should be fumigated two or three times with the nitrous vapours, as directed page 99, which with cleanliness will contribute much towards the recovery of the patient.

The fæces and urine should be thrown away as soon after they are evacuated as possible, and the vessel rinsed out with vinegar.

The bleeding should be suppressed by the application of styptics; such as a solution of alum, with dossels of lint.

In case of ulceration, the lemon juice, with tincture of myrrh, or vinegar and myrrh, will prove the most efficacious application.

The *true* sea scurvy exhibits, in a remarkable degree, the great influence of the passions of the mind*. Depression of spirits, bordering on despondency, is its constant attendant, the counteracting of which, experience has proved to be of the utmost consequence to the recovery of the patient. In Lord Anson's voyage, it was noticed in reiterated experience of this malady, "that

* Hoffman de Scor. et ejus vera indole.

whatever discouraged the seamen, or at any time damped their hopes, never failed to increase the distemper; for it usually killed those who were in the last stages of it, and confined those to their hammocks who were before capable of some kind of duty; so that (as the writer judiciously observes) it seemed as though alacrity of mind and sanguine thoughts were no contemptible preservatives from its fatal malignity." And in Mr. Ive's journal, a remarkable instance of the good effects of an opposite state of mind is given: "Upon the British fleet coming into the Bay of Hieres (Feb. 1744), the men understood they were soon to engage the enemy's fleet. There appeared, not only in the healthy, but also in the sick, the highest marks of satisfaction and pleasure, and the latter mended surprisingly daily, insomuch that, on the 11th of February, the day they engaged the combined fleets of France and Spain, there were not above four or five men but what were at their fighting quarters." The siege of Breda, in the year 1625, affords an example of the influence of the mind in this disease still more striking: "That city, from a long siege, suffered all the miseries that fatigue, bad provisions, and distress of mind could bring on its inhabitants. Among other misfortunes, the scurvy made its appearance, and carried off great numbers. This, added to the other calamities, induced the garrison to incline towards a surrender of the place; when the Prince of Orange, anxious to prevent its loss, and unable to relieve the garrison, contrived, however, to introduce letters, addressed to the men, promising them the most speedy assistance. These were accompanied with medicines against the scurvy, said to be of great price, but of still greater efficacy; many more were to be sent to them. The effects of this deceit

were truly astonishing: three small phials of medicine were given to each physician. It was publicly given out that three or four drops were sufficient to impart an healing virtue to a gallon of liquor. They now displayed their wonder-working balsam; nor even were the commanders let into the secret of this cheat on the soldiers. They flocked in crowds about the dispensers of it, every one soliciting that part might be reserved for his use. Cheerfulness again appeared in every countenance, and an universal confidence prevailed in the sovereign virtues of the remedy. The effect of this delusion was really astonishing; for many were quickly and perfectly recovered; such as had not moved their limbs for a month before, were seen walking in the streets, with their limbs sound, straight, and whole. They boasted of the cure by the Prince's remedy, the motion of their joints being restored by simple friction with oil. Many who had declared they had been rendered worse by all former remedies, recovered in a few days, to their inexpressible joy, and the no less general surprise, by their taking what we affirmed to be their gracious Prince's cure." This curious relation (adds Dr. Lind*) would perhaps hardly gain credit, were it not in every respect consonant to the most accurate observations, and the best attested descriptions of that disease. It is given us by an eye-witness, an author of great candour informs us, wrote down every day the state of his patients, and seems to be more surprised with their unexpected recovery than he probably would have been had he been better acquainted with the nature of the malady. An im-

*. Lind on the Scurvy, page 349.

portant lesson in physic is hence to be learned, by the wonderful and powerful influence of the passions of the mind on the state and disorders of the body. This is too often overlooked in the cure of disorders, many of which are sometimes attempted by the sole mechanical operation of drugs, without calling in to our assistance the strong powers of the imagination, or the concurring influence of the soul. Hence it is, the same remedy will not always produce the same effect even in the same person; and that common remedies often prove wonderfully successful in the hands of bold quacks, but do not answer the purpose in a timorous and distrustful patient!

OF SMALL POX.

This disease is highly infectious, and the constitution that has been once under its influence, is thereby rendered secure against its future attack. When the pustules are separate from each other, it is termed *distinct*, and when they run together, it is denominated *confluent*.

SYMPTOMS.—Like other eruptive fevers, it comes on with shiverings, pain in the head, nausea, and the ordinary symptoms of fever, and sometimes, a few hours before the eruption, children are affected with convulsions. The eruption appears about the *fourth* day of the *fever*, first on the face, and afterwards on the neck, breast, and body. The pustules gradually enlarge and proceed to maturation, which is completed about the *eleventh* day after their first appearance, when the attendant inflammation and swelling manifestly abate, the eruption beginning to dry and scale off, and about the fifteenth day entirely disappears. The confluent sort is generally attended with

more violent symptoms than the distinct, but observes the same period of termination, &c.

CAUSE.—It is produced by *specific* contagion.

TREATMENT.—The small-pox, like the measles, always runs its determined course; all, therefore, that art can do, is to lessen the attendant fever, and to combat unfavourable symptoms. The great advantage of inoculation is, that precautions may be used, from the *certain* knowledge of the fever, which cannot be employed in due time, when received naturally; besides, the mode of introducing it into the constitution, evidently makes a difference in the subsequent symptoms. To avoid a full crop of the eruption, and to keep down the feverish symptoms, a dose of the basiliac powder, No. 36, should be taken soon after inoculation, and repeated every third day till the eruption appears, provided the subject be not very weakly. Or if the infection has been received *naturally*, fifteen drops of antimonial wine in a dose of the saline mixture, No. 78, may be taken every six or eight hours, till the feverish symptoms are abated: a low and cool diet will be proper. Barley water, acidulated with tamarinds, may be taken frequently. If the feverish symptoms run high after the eruption has appeared, the basiliac powder and antimonial wine should be repeated, and the saline mixture taken oftener. When the pustules begin to mature, the patient may be permitted gradually to take to his usual diet; and if the crop be considerable, and the strength of the patient much reduced, provided he be free from fever, a glass of port wine may likewise be allowed after dinner. If symptoms of *putrid* fever intervene, viz. low pulse, delirium, extreme debility, purple eruptions, &c. the powers of the system should be supported by a liberal

allowance of cordials, a nourishing diet, as beef tea, animal jellies, and the camphorated bark mixture, No. 67, page 68. On the *first appearance*, however, of such symptoms, the most able advice should be called in, the life of the patient being in great danger.

The matter for inoculation should be taken about the seventh day of the eruption, on a lancet or needle, with which the skin of the person need be only slightly scratched. (See *Cow Pox*.)

OF SPITTING OF BLOOD.

It is often difficult to determine, in cases of spitting of blood, whether it proceeds from the internal surface of the mouth, from the fauces, from the adjoining cavities of the nose, from the stomach, or from the lungs; it is, however, of importance to ascertain its source, which in most cases may be done, by attending to the following observations: When the blood proceeds from some part of the internal surface of the mouth itself, it comes out *without any hawking or coughing*; and generally, upon inspection of the mouth, the particular source of it becomes evident. When it proceeds from the fauces, or the adjoining cavities of the nose, it may be brought out by hawking, and sometimes by coughing, as from the lungs, so that in this way a doubt may arise concerning its *real* source. A bleeding from the fauces is, however, *more rare* than one from the lungs, and seldom happens but to persons who have been *before* liable, either to bleeding at the nose, or to some evident cause of erosion; and in most cases, by looking into the fauces, the blood may be perceived coming from thence.

When the blood is of a *florid* and *frothy* appearance,

and brought up with more or less *coughing*, preceded by *rigors* and other feverish symptoms, with *anxiety*, and a sense of *tightness across the chest*, there can be no doubt but that its source is from the *lungs*. When vomiting accompanies the throwing out of blood from the mouth, as vomiting and coughing often mutually excite each other, so they may be frequently joined, and render it doubtful whether the blood thrown out proceeds from the lungs or the stomach; we may, however, generally decide, by considering that blood does not so frequently proceed from the lungs; that the blood proceeding from the lungs is usually of a *florid* colour, and mixed with a little *frothy mucus only*; while the blood from the *stomach* is commonly of a *darker colour*, more grumous, and mixed with the *contents of the stomach*; that the coughing or vomiting, according as the one or the other *first* arises in the cases in which they are afterwards joined, may sometimes point out the source of the blood; and lastly, that much may be learned from the circumstances and symptoms which have *preceded* the discharge.

When the source is from the stomach, it is termed *vomiting of blood*, which is considered in its alphabetical order. When the origin is in the mouth or fauces, it is of little consequence, and may be checked by the use of the astringent gargle, No. 94, and the loss of blood from the arm, if attended with a plethoric state of the system. If the cause be erosion or ulceration, or if it occurs during fever, the treatment must depend on the nature of such fever or ulceration.

What is strictly meant by *spitting* of blood, is when the blood is discharged from a ruptured vessel in the lungs, which is technically termed *Hæmoptoe*. It occurs gene-

rally from the age of sixteen to thirty-five, and chiefly arises from a faulty proportion between the capacity of the vessels of the lungs, and those of the rest of the body; accordingly it is often an hereditary disease, which implies a peculiar and faulty conformation. It likewise happens, especially to persons who discover the *smallest capacity* of the lungs, by the *narrowness* of the *chest*, and by the prominence of their shoulders, which last is a mark of their having been long liable to a difficult respiration. It happens likewise to persons of a slender delicate make, of which a long neck is a sign; to persons of much sensibility and irritability, and therefore of quick parts, whose bodies are generally of a delicate texture. It likewise frequently arises from suppression of the menstrual discharge; from plethora, and violent exercise of the lungs.

The most frequent, if not only cause of the rupture of a blood vessel, in the lungs, is, the deposition of scrofulous matter, in the substance of the lungs, forming what are termed tubercles. The blood vessels being partially distended by the pressure of tubercles, are easily ruptured by cough, and slight exertion of the body. The lungs of people who have died of the excessive loss of blood, or of the consequence of the ruptured vessel: viz. Pulmonary consumption, I have always found loaded with tubercles. (See *Pulmonary Consumption*).

TREATMENT.—The discharge of blood may be moderated by avoiding whatever has a tendency to irritate the body and increase the action of the heart; a low diet should therefore be strictly observed, and external heat and bodily exercise avoided; the air of the room should likewise be kept cool, and the drink (which should consist chiefly of barley-water, acidulated with lemon-juice) taken

cold, and the patient not suffered to exert his voice. After the operation of a little gentle aperient medicine, as lenitive electuary, or an infusion of senna, with a little cream of tartar dissolved in it, two table-spoonfuls of the following mixture may be taken to diminish the excitability of the system and quiet the circulation :

Take of almond emulsion six ounces; acetated ceruse five grains; distilled vinegar two drachms; syrup of white poppies, half an ounce, Mix.

In case of much cough, five drops of laudanum may be added to each dose of the mixture; but this medicine must not be resorted to unless it be violent.

If the pulse be not much reduced by the discharge, a few ounces of blood should be taken from the arm, and a blister applied over the breast-bone, especially if pain be experienced in the chest, either on coughing or breathing.

Emetics have been given in those cases with advantage by Dr. Robinson, and still more lately by Dr. Stoll, of Vienna, who observes, that in discharges of blood from the lungs, ipecacuan powder sometimes acts like a charm, seeming to close the open vessel sooner and more effectually than any other remedy*.

When the discharge has ceased, its recurrence should be prevented by the following means: the use of cooling astringent medicines, as a wine-glassful of the infusion of red rose leaves, with six drops of the diluted vitriolic acid three or four times a day; the loss of blood from the arm on experiencing any pain in the chest or difficulty of

* Dr. Stone in a treatise on indigestion, disapproves of the use of emetics, because *they may occasion a rupture of a blood-vessel of the lungs!*

breathing ; a seton in the side, or perpetual blister between the shoulders, or over the breast-bone ; flannel next the skin ; avoiding much exercise, particularly of the lungs ; the occasional use of aperient medicines to obviate costiveness, and a spare diet, consisting principally of animal jellies ; but diseases of this class are so formidable, that it is adviseable to call in an experienced practitioner without delay. (See *Pulmonary Consumption*).

OF STRANGURY.

When this complaint succeeds the application of blisters, the free use of diluting liquids, as linseed tea or barley water, with a few grains of nitre powder, and a little gum arabic, will generally afford relief in the course of a few hours. When it is occasioned by the pressure of an impregnated womb, costiveness should be avoided by small doses of castor oil, and an horizontal position observed as much as possible. When attendant on the stone or gravel, it may be relieved by the means already recommended for those complaints.

OF STRICTURES.

Although strictures in the urethra are not always the consequences of venereal infection, yet for the same reason I omit the venereal disease in this work, I cannot notice strictures arising from any other cause. In my Medical Dictionary I have given some plain directions for the treatment of strictures, under the head of *Bougie*.

SWEATING, PROFUSE.

Excessive perspiration attendant on inflammatory fevers

or internal inflammation, as pleurisy, &c. should always be considered *salutary*. If it be evidently the consequence of debility or relaxation of the system, the diluted vitriolic acid, as directed No. 18, will prove the best remedy.

In all cases of perspiration, it is of great importance to determine whether it be a *disease* or an *effort* of nature to expel any morbid matter from the system, or to relieve it of plethora, which often requires an experienced practitioner to decide; even the colliquative sweats attendant on hectic fever, are to be suppressed with the greatest caution.

OF TENESMUS.

SYMPTOMS.—A constant irritation at the fundament, with an inclination to go to stool, when little or nothing can be discharged, except slime or mucus, which is sometimes streaked with blood, are the characteristic symptoms of this complaint.

CAUSES.—It is often attendant on stone in the bladder, and frequently occasioned by inflammation of the neck of the bladder, from gravel, or the use of astringent and stimulating injections. It is likewise frequently produced by small worms in the rectum, acrid humours, the pressure of an impregnated womb, piles, &c.

TREATMENT.—When it is produced by the irritation of a stone in the bladder, it will require the same treatment as already directed for Stone.

When it is occasioned by inflammation of the neck of the bladder (from whatever cause the inflammation may arise), the application of leeches, the use of castor oil, as

directed No. 3, and the warm bath will be necessary, and general bleeding, if the subject be of a plethoric habit.

If worms be the cause, the treatment recommended for their expulsion will be necessary; and if attendant on pregnancy, small doses of rhubarb, No. 25, or lenitive electuary, No. 47, and lying on the right or left side when in bed, instead of the back, will generally afford relief.

In all cases *aloetic* medicines are highly improper; the frequent use of which having, from their stimulating effects on the rectum, often produced the disease.

OF TETANY.

This disease is a spasmodic affection, and occurs chiefly in warm climates.

SYMPTOMS.—It is characterised by an involuntary and continued contraction of all or several of the muscles of the body, receiving various appellations according to the situation of the parts attacked. When the muscles of the jaw are principally affected, it is named *Trismus* or *Locked Jaw*. It commences with a stiffness in the back of the neck, which gradually increases to a pain, and renders the affected part entirely immoveable. It extends to the root of the tongue, affects the part concerned in swallowing, then attacks the front of the chest, and lastly seizes the back. Spasms at length arise in the stiffened parts, occasioning such excruciating pain, that death is often wished for, both by the patient and his attendants. A remission of the spasms often takes place every ten or fifteen minutes, but is renewed with aggravated torture on the slightest causes, even by the least motion of the person, or the touch of an attendant. The teeth become entirely closed, so that nothing can be introduced into the mouth;

and towards its termination, the voluntary muscles of the body are affected, producing the most hideous deformity.

No permanent fever attends this disease, though some temporary symptoms of it appear during the violence of the spasms. No habit of body is exempt from it, but the robust and strong are most frequently its victims.

CAUSES.—Cold and moisture, particularly sudden vicissitudes or irritation of the nerves in consequence of local injury, as punctures, cuts, &c. are noticed by medical authors as causes of this disease.

TREATMENT.—When the disease arises from a wounded nerve, the most important step towards the cure is, to cut off the communication of the part with the brain, either by dividing the nerve in its course, or by destroying, to a certain extent, the affected part. If the wound be on a finger or a toe, it should be amputated.

Opium is the only anti-spasmodic that can be depended on in the cure or palliation of this disease: sixty drops of laudanum should be given in a little wine every three or four hours, and the dose increased ten drops each time, till the violence of the spasms is evidently abated; it should then be continued at that dose for some time longer, the disease being very liable to recur. This medicine, even in large doses, does not operate in these cases as in other diseases; for although it produces some remission of the spasm and pain, it scarcely ever induces sleep, or occasions that stupor, intoxication, or delirium, which it generally does in other complaints. Opium has been given, and in a few instances with success, to the extent of half a drachm, which is equal to about three quarters of an ounce of laudanum.

If the muscles of the jaw, and those concerned in swal-

lowing, be so much affected that this remedy cannot be got into the stomach, it must be administered clysterwise, by dissolving about two scruples, or a drachm of opium in half a pint of gruel, which should be injected every three or four hours. If the jaws be so closed by the spasm of the muscles, that they cannot be opened during any period of the day, it will be adviseable to remove a portion of the front teeth by a small saw or trephine, for it is certainly of great consequence to get the remedy as well as nourishment into the stomach, which may in general be afterwards done by means of a flexible tube; if, however, the muscles of deglutition and those of the gullet be affected, the body should be immersed in warm milk, two or three times a day, from which a sufficient quantity will be absorbed to support life; and I think if the milk were strongly impregnated with opium, it might also tend to abate the spasms.

Mercury has been much recommended as a remedy for this disease; and as it does not interfere with the exhibition of opium, a drachm of the strong mercurial ointment may be rubbed on the inside of the thigh twice a day, till the whole has entered the system; and in order to accelerate its operation on the constitution, the body may be placed in mercurial fumes, as directed by Lalouette, and lately recommended by Mr. Abernethy, in order more speedily to saturate the system with mercury, which in so formidable a disease is certainly of the utmost importance. For this purpose the patient should be enclosed, *naked*, in a kind of box resembling a sedan, having above an opening which encircles the neck, and at the bottom another for the reception of a grate and heated iron;

the mercurial powder* is to be thrown on the iron, and after the fumes are entirely dispersed over the body, a flannel dress, which has also been fumigated, should be put on†.

Cold bathing is much extolled, and it seems in many instances has succeeded in curing this disease : and as the use of the warm bath is very doubtful, and in many cases has proved hurtful, the cold bath should have the preference.

The application of blisters, and loss of blood, have apparently, in some instances, proved serviceable ; but in the majority of cases they have had no salutary effect, and in many have appeared to aggravate the symptoms.

This disease being entirely an affection of the nerves, friction by the electrical brush, as directed in cases of rheumatism and gout, is likely to prove very beneficial by exciting an healthy action in the nerves of the part.

As irregular actions of the muscular system are often produced by irritation in the stomach or intestines, it would also be adviseable to empty them by a strong dose of the cathartic extract and calomel, both by the mouth and clysterwise, which should be frequently repeated. As the exhibition of opium will retard the action of purgative medicines, instead of administering it by the mouth it might answer as well, and probably better, if the body were im-

* The grey precipitate of mercury and cinnabar are generally employed for this purpose, but calomel will answer as well.

† Sir Charles Blicke, surgeon to St. Bartholomew's Hospital, recommends stockings and a flannel waistcoat, fumigated with mercury, to be worn next the skin, with the view to produce mercurial effects both locally and on the constitution, without the fatigue and other unpleasantness of rubbing in the ointment.

mersed in a strong solution of opium in luke-warm water. And as it is in the *commencement* of this disease that remedies are to be employed with a *probability* of success, medical aid should be procured as early as possible.

OF TIC DOLOUREUX.

This disease consists in a painful affection of the nerves of the face ; and of all the chronic diseases to which the human frame is subject, is the most distressing. It is fortunately of rare occurrence. Its most frequent seat is the nerves of the cheek just below the orbit of the eye, the end of the nostrils, the upper lip, and the teeth and gums. Sometimes the nerves of the lower jaw are principally affected. From the connection between the branches of the nerves of the face, the pain often extends to the tongue, ear, and over the face.

CAUSES.—The real cause of this affection has not been ascertained. It has been attributed by some to a cancerous acrimony ; but as cancer has never been known to occur in people subject to the disease, there can be no foundation for such supposition. It more probably arises from a diseased state of the nerves affected.

TREATMENT.—The external application of anodyne and stimulating liniments, blisters behind the ears, bleeding by leeches, mercurial inunction, and electricity, have, in some instances, been found to palliate the sufferings of the patient ; but in others they have not even produced the slightest mitigation : nor has the internal use of the usual nervous medicines, as valerian, camphire, opium, and Peruvian bark, been productive of greater success. Shaving the head and washing it with cold water twice a day, and placing the head for two or three minutes under a stream

of cold water three or four times a week, I have lately known to succeed in two cases which resisted the usual means. The same directions respecting medicines, diet, &c. for correcting the state of the digestive organs, were also observed, as given for indigestion, page 343.

A case of this disease cured by the long use of hemlock, has been lately published. In the many trials I have known made of it, it failed to prove of the least advantage, and in every instance the dose was gradually increased to the same extent. Like many other diseases, it will terminate spontaneously, when the medicine the patient happened to be taking at the time obtains the credit of the cure.

Dr. Baillie recommends three or four grains of the extract of the henbane to be administered in the form of pill, two or three times a day: and in those morbid nervous actions, this experienced physician states, that he has found it to answer much better than any of the vegetable narcotics.

Dr. Haighton, finding that a temporary relief was obtained by compressing the suborbital nerve, was induced to entirely divide the nerve, and in several instances this operation has succeeded, in his, and also the practice of others.

Mr. Andre, a surgeon at Versailles, had before cured this complaint by burning the nerve with caustic, and by excision.

Dr. Haighton has given a drawing in the Medical Researches, for 1798, which shows the exit of the suborbital nerve and its branches, accompanied with precise directions where the incision should be made. The great severity and obstinacy of the disease can only justify the operation.

This complaint being evidently confined to the nerve, the use of the electrical brush, by exciting a proper action of the nerve, appears to me to prove a powerful auxiliary.

OF THE TOOTH-ACH.

This well-known disease in general arises from the exposure of the nerve of the tooth to the action of cold air or acrid matter, in consequence of caries. It is, however, frequently occasioned by inflammation of the membrane lining the socket, in which case the tooth is a little elevated, seldom carious, very painful to the touch, and attended with a throbbing pain which often extends to the neighbouring teeth. This latter kind generally terminates in the formation of matter, commonly termed a gum-boil.

When the tooth is carious, its extraction may in some instances be adviseable, which, when properly managed, is attended with considerably less pain than a severe paroxysm of the tooth-ach.

When the decay of the tooth appears to be a *constitutional* disease, its removal is not in all cases to be advised, as the same diseased action will, in that case, very probably, go on in another tooth. It is a prevailing opinion with surgeons and dentists, that one bad tooth will contaminate the one next to it; in this instance, I am well persuaded that its continuance in the jaw will be the means of preserving the others sound.

When it is *inflammatory*, in which case the tooth is generally sound, the cure should be attempted by extracting blood from the gum by leeches or scarification, which, with the use of an aperient medicine and the antimonial febrifuge powder, as directed No. 37, will generally succeed; if, however, it should prove obstinate, a blister may be

applied behind the ear, and the scarification or application of leeches repeated. The angustura bark powder, in the dose of fifteen grains, taken every four hours in a little water, is much recommended as a remedy for tooth-ach. When it is entirely nervous, or arises from a disordered state of the stomach, I have known this medicine to succeed in curing it in a few hours.

The frequency of the pain may in all cases be mitigated by the application of ether and laudanum, by covering the tooth with a small piece of lint moistened therewith, and afterwards keeping the mouth closely shut for some time. The mouth should be previously rinsed out with warm water, to remove any acrid matter that may be lodged in the cavity of the tooth. A pill of camphor and opium has been very successfully applied to allay the pain, and also oil of cloves, thyme, and pellitory of Spain. The exclusion of the atinospheric air, by filling the cavity with gum mastic and white wax, melted together, or a little lint, will not only prevent its recurrence, but often suspend the progress of caries.

Dr. Handel, of Mentz, recommends the following pill as a very powerful sedative in tooth-ach, when occasioned by corrupted or rotten teeth; upon the application of which, the Doctor states, the excruciating pain almost instantly caeses:

Take of opium, half a drachm; extract of deadly nightshade and camphor, of each six grains; oil of henbane, one drachm; cajeput oil and tincture of cantharides, of each eight drops. To be formed into a mass, and a little to be introduced into the decayed tooth, either in the form of pill or on lint.

The effects of fear on an acute attack of the tooth-ach, is remarkable. The sight of the instrument for extracting

the tooth, often giving perfect relief, even when the pain has arisen from a carious tooth*.

Of all animals man is the most subject to disease of the teeth, and it is strange that a decay of this very useful part of the body should take place in young people, apparently in a perfect state of health. The gums, by the firmness of their texture tend to support the teeth in their sockets, and being also abundantly supplied with blood-vessels, the teeth, and particularly their external coats, termed enamel, derive their nourishment from them. Hence it must appear clear, that on the healthy state of the gums depends the health of the teeth. Indeed in all cases of caries of a tooth, we uniformly find the surrounding gum either diseased, abraded, or detached, by the use of improper tooth powder, or hard brushes. The matter that collects on the teeth termed tartar, is evidently a morbid secretion from the gums, in consequence of their being spongy, or of irritation, or separation from the teeth, the latter of which is the most frequent cause. The brush and powder employed for the purpose of removing the matter, both tend to aggravate the evil by abrading the gum as well as the enamel of the teeth, and by the spreading of the hairs of a brush, the gums are detached from the teeth, and their edges irritated. Hence people who are in the habit of using them, are under the necessity of repeating the operation every morning in order to keep them clean.

The teeth receiving their nourishment from the gums,

* Dr. Falconer observes, that he recollects this complaint, when not very violent, to have been cured by the application of the artificial magnet.

a diseased state of the gums, or their detachment from the teeth, sufficiently account for caries, or unhealthy appearance of the teeth. I therefore advise people to pay more attention to the state of the gums, and instead of cleaning their surfaces with powder and a hard brush, to wash the gums gently, internally as well as externally, every morning or three times a week, with equal parts of tincture of rhatany root, and water, by means of a piece of sponge, fastened to an ivory handle. This, by constringing and strengthening the gums will, not only render the teeth more firm in their socket, but effectually preserve them from disease, and prevent the accumulation of tartar, and also the tooth-ach. The teeth may also be gently rubbed with the same sponge-brush, and diluted tincture of rhatany, with the surface covered with the charcoal of the areca. A hair brush should not be employed, but when the tartar in consequence of neglect, adheres too firmly to the teeth to be removed by the sponge. When a hair brush is employed, care should be taken, that the gum be not irritated by it.

Such as follow these directions will have no occasion to employ a dentist. Those that are in the habit of using a hair brush and the mineral tooth powders of dentists, and stimulating washes of tincture of myrrh, &c. have their edges of their gums tumified and tender, while the gums of those who do not use them, and who have the soundest teeth, are nearly level with the surface of the teeth.

Ricketty and scrofulous children are very subject to caries of the teeth. In those cases topical management will be of little avail, unless the state of the constitution be corrected. (See *Rickets and Scrofula*).

Nothing is more injurious to the enamel of the teeth,

than sugar or sweet meats, particularly in rickety and scrofulous subjects.

Under the head of prepared charcoal, page 97, I have made some further observations on tooth powders, and given more explicit directions for their use.

OF TYPHUS, OR PUTRID FEVER.

This disease is likewise named *malignant*, *camp*, *gaol*, *pestilential*, and when attended with livid spots, *petechial* or *spotted* fever. It occurs most frequently in autumn, and the end of summer, when the days are hot, and the nights cold and chilly. Weakly people are most subject to it.

SYMPTOMS.—It commences with pain in the head, vomiting, slight shiverings, intense and permanent heat, great thirst, irregular pulse, (being sometimes tense and hard, and at others quick) but small, while the arteries of the temples and neck often appear to beat with increased force, with flushing of the face, redness of the eyes, denoting a considerable determination of the blood to the head. An increase of the fever is observable every evening; and in a few days the patient becomes delirious, the tongue dry, and of a blackish or a livid appearance, attended with great prostration of strength, and an offensive breath. The delirium becomes more constant, and at length changes to a stupor; an eruption of livid or purple spots sometimes appears; the stools at this period are blackish, which, as well as the urine, emit a disagreeable odour, and sometimes, are discharged involuntarily. There is also great anxiety about the heart, and great inclination to sigh, sometimes attended with a discharge of blood from the nose, gums, intestines, or with the urine. A copious and ob-

stinate purging, cold clammy perspirations, and hiccup, precede its fatal termination.

CAUSES.—Putrid air, lowness of spirits, poor diet, and whatever weakens the nervous power, are enumerated by authors as causes of this disease. It is evidently produced by putrid effluvia, but in what manner it acts on the system, and the nature and real seat of the disease, I believe to be little understood.

The first symptoms, as the acute pain in the head, the turgid state of the vessels of the eyes, and the increased action of those in the neck and temples, the disordered state of the mind, the deprivation of sleep, and affection of the whole nervous system, indicate a very diseased state of the brain. On the examination of those who have died of this disease, it appears to me, that it is primarily a specific inflammation of the brain, produced by the peculiar stimulus of putrid effluvia; which, in a short time, by injuring that organ, and impeding its functions, produces those symptoms of debility in the system which sooner or later take place, and which are attributed by some writers to a putrescency of the fluids.

TREATMENT.—This disease, when once established, generally runs its course, in defiance of medicine, and whether it terminates fatally or otherwise, will in great measure depend on the natural constitution of the patient, hence it is of great importance to check the progress in its onset: for this purpose a dose of emetic tartar, No. 35, should be given on its first attack; which by evacuating the stomach and bowels, producing an equal distribution of blood over the body, and promoting the different secretions, often succeeds in abating the symptoms, if it should fail effectually to check it. If the symptoms continue, the

head should be shaved, and a blister applied to the scalp, leeches to the temples, and the feet kept warm by frequent immersion in warm water. The saline mixture should be given, in a state of effervescence, as recommended under the head of crystallized acid of lemon. No. 22, or a table-spoonful of yeast, twice a day. Fixed air, administered in this manner, affords more relief than any medicine we are acquainted with ; and, in several instances, has alone proved an effectual remedy, not by counteracting putrescency, as has been imagined, but by cooling the body, abating thirst, and diminishing the excitability of the system. The room should be spacious, and well ventilated and fumigated, as directed page 99. Washing the body with *cold* vinegar, when the skin is hot and dry, and the application of it to the scalp and forehead, by means of folds of linen, have proved very beneficial, probably by conducting from it superabundant heat, and by bracing the body. The application of cold water or ice to the head has been much extolled in this disease ; but cold vinegar is certainly preferable. The patient may likewise be desired to smell a sponge, moistened with the acetic acid, No. 38, at a short distance from the nostrils ; a little of which may likewise be sprinkled over the quilt of the bed, or evaporated in a saucer, (over the blaze of a candle) which, in *small* rooms, will supersede the necessity of the more elaborate process of fumigation. The smelling of the volatile salt in this case is very improper, as it is apt to increase the delirium, and has no effect in destroying the infectious effluvia of the body. Yeast, in the quantity of a table-spoonful every three or four hours, has been administered in this fever with great success, by many physicians in the country, who attribute its salutary effects to

the fixed air it contains : it is more probable that the advantage derived from it arises from the peculiar anodyne property of the hop, with which it is strongly impregnated. On account of the brewers in London substituting other bitter productions for the hop, the yeast procured from them has not been found to answer in such cases. The hop is more efficacious in allaying the nervous restlessness attendant on this fever than any other anodyne. The food should be principally weak veal broth thickened with a little arrow-root or oatmeal, and the drink mint tea or barley water, acidulated with lemon juice.

If, on the fifth or sixth day of the disease, symptoms of debility come on, and the patient be evidently in a sinking state, a more nutritious diet may be allowed, and the strength of the patient supported with port wine, and the camphorated bark mixture, No. 67, page 68. If the brain be not affected, and the fever evidently depends on debility, this treatment will prove very beneficial, and the patient will appear very considerably refreshed by every dose of the medicine. This fever often attends the confluent small-pox. Inflammation of the brain, produced by the action of putrid effluvia, is less active than that occasioned by the application of cold, noticed under the head of inflammation of the brain or phrenzy, and seems to attack the membranes of the brain chiefly, while, in the latter case, the substance of the brain and membranes are affected : it does not therefore require the active means there suggested for its resolution, or to be pursued any longer than indicated by the state of the patient, and the relief afforded by the lowering plan, &c.

If purging should come on so as to reduce the strength of the patient, the cretaceous mixture, No. 64, page 68,

should be administered, and the anodyne lavement, No. 96, or the nutrient lavement, No. 99, if it be violent.

The tongue becoming more clean and moist, and the countenance more animated, are very favourable prognostics. The dark foul state of the surface of the tongue, often extends throughout the intestinal canal, which being thrown off as the patient recovers, produces purging, which in such cases should be moderated, and not entirely checked.

When treating on inflammation of the brain, I observed, that this disease was often mistaken for putrid fever, and there noticed a well marked case of the kind, which was so treated by a country apothecary; the disease, of course, terminated fatally, and I availed myself of the opportunity of examining the state of the brain.

The following case will prove that the nature of this fever is not generally understood. An experienced practitioner in Herefordshire, was requested to see a patient affected with fever; on his arrival he found the patient delirious, and labouring apparently under symptoms of debility, and from its being epidemical in the neighbourhood, he pronounced it typhus fever, and as such treated it, by administering cordial medicines. The symptoms of delirium afterwards increased, and the patient, in a fit of phrenzy, divided his wind-pipe with a razor, by which he lost nearly two quarts of blood, before surgical assistance could be obtained. The surgeon approximated the edges of the wound with a ligature and proper bandages, and gave his opinion that the loss of blood, under such circumstances, would prove fatal; but to his great surprise, the patient speedily recovered, and the wound healed on

the first intention, so that the patient, in this instance really cured himself by cutting his throat.

If medical men of judgment be deceived in the nature of this disease, it cannot of course be a proper case for domestic medicine; in this, and indeed in all other fevers, I seriously advise the calling in of a practitioner of approved judgment and skill, on their first attack, or at least, if they continue after the operations of emetic, aperient, and sudorific medicines.

The nature of this fever is not understood; it sometimes commences in the brain, and the circulation and constitution are not affected for three or four days; at other times it first attacks the stomach and bowels, and the head is not affected for some days afterwards. If its progress be not checked in the first instance by an emetic, an aperient, and sudorific medicine, the office of the physician is to attend to the indications of nature, and to take care that no injury be done to the patient by officious nurses or friends. Routine physicians often employ, in the first instance, wine and bark, which, if the disease commence in the stomach and bowels, will even destroy that chance of recovery which depend on the strength or impaired state of the constitution.

For the means of destroying putrid or contagious effluvia (see page 99.)

OF VOMITING.

When vomiting is the effect of poisons taken into the stomach, it requires the treatment already recommended for poisons, page 104.

Vomiting is a very common attendant on pregnancy, and the most healthy women, as well as the weak and deli-

cate, are equally subject to it; the symptoms require, however, different treatment in those opposite states. When it is attended with *fulness* of the vessels and determination of blood to the brain (evinced by pains and giddiness in the head, flushing in the face, and bleeding at the nose,) blood-letting, with gentle purgatives, as the Epsom water, No. 2, taken every morning, and a spare diet, will afford relief; but when it occurs in a delicate woman, and attended with symptoms of debility, such as languor and profuse perspirations, a nutritious but light diet, with a moderate use of port wine, will prove most beneficial. Two table-spoonfuls of the following mixture may likewise be taken two or three times a day:

Take of infusion of roses, seven ounces; Epsom salt, two drachms; compound tincture of cardamom seeds, six drachms. Mix.

Moderate exercise will, in both cases, be necessary. Emetics should not be administered without the sanction of a skilful practitioner, as their injudicious exhibition may produce abortion. When vomiting arises from *weakness* or *irritability* of the stomach, or acidity, it should be considered as a symptom of indigestion, and as such treated. When the matter thrown up is bilious, the neutral salts, No. 2, and the diluted vitriolic acid, No. 18, will be proper, to which a few drops of laudanum may be added in case of much straining. When vomiting is the consequence of hard drinking, diluents, as tea and coffee, with a dose of magnesia, No. 1, or salt of wormwood, No. 21, will prove the most efficacious. When the cause is not evident, the saline draughts, in a state of effervescence, (see No. 22), with the occasional use of small doses of rhubarb and laudanum, may be employed, and an anodyne plaster applied to the pit of the stomach.

Vomiting is often attendant on organic disease of the stomach, schirrosity of the pylorus, or ulceration of the inner coat of the stomach; in such cases two or three grains of extract of poppies, or one of purified opium, taken twice a day, with linseed tea and lime water, will afford relief.

Vomiting is generally a symptomatic affection, when the cure will of course depend on the nature of the primary disease.

Vomiting of children frequently arises from their being over-fed, when the matter brought up is for the most part sour. A little magnesia or prepared natron in mint water, will, in such cases, prove beneficial. If the stools be green or of a clay colour, a gentle emetic dose of ipecacuan powder will be necessary. (See feeding of children.)

OF VOMITING OF BLOOD.

When blood is discharged into the stomach, and brought up by vomiting, it is thus termed; and when it proceeds from the lungs, although its expulsion be assisted by vomiting, it is termed hæmoptoe, or spitting of blood. In describing the latter affection, I noticed in what manner the source of the blood thrown out from the mouth might be ascertained. When the blood is brought up without coughing, if of a black and grumous appearance, and mixed with the contents of the stomach, there can be no doubt that it proceeds from the stomach.

CAUSES.—It generally arises from the suppression of accustomed evacuations, as the menses or piles.

TREATMENT.—If the patient be of a plethoric habit of body, the loss of eight or ten ounces of blood from the arm

will be necessary ; after which three table-spoonfuls of the following mixture should be taken every four hours ;

Take of red rose leaves dried, two drachms ; infuse in half a pint of boiling water for three hours, than strain, and add diluted vitriolic acid, two drachms ; tincture of rhatany root, half an ounce. Mix.

It will likewise be proper to produce a determination of blood to the skin, by small doses of ipecacuan powder, combined with opium, as two grains of the former, with half a grain of the latter, or eight drops of laudanum. With the same view the feet should be put into warm water for ten minutes. If these means fail to check the bleeding, six or eight grains of alum in powder may be added to each dose of the mixture, and a blister applied to the pit of the stomach.

Thin gruel will be sufficient both for food and beverage, which should be taken cold. If it arise from suppression or retention of the menses, after the discharge has ceased for some days, the remedies already recommended for these complaints should be employed to produce a proper determination to the womb. (See *Green Sickness* and *Suppression of the Menses*.)

When the cause is a suppression of the piles, the occasional use of aloetic purges, as the compound colocyntu pill, No. 46, will prevent its recurrence.

OF THE WATER BRASH.

This disease is very prevalent in Scotland and Ireland, but rarely occurs in England. It chiefly appears among the lower order of people, and more commonly at middle age, though sometimes old people are subject to it. It affects females oftener than males, and of married women (unless during pregnancy) the barren are most subject to

it. It consists in a discharge of clear water by vomiting or eructations, attended with a burning heat about the pit of the stomach. It generally comes on by fits, which are most frequent when the stomach is empty, as in the morning and forenoon. The pain is considerably abated by eructations and vomiting, but it does not entirely terminate for some time.

CAUSES.—This disease is generally produced by the intemperate use of ardent spirits, particularly whiskey, and a poor diet. Passions of the mind, and cold applied to the lower extremities, are often exciting causes.

TREATMENT.—The spasms of the stomach may be relieved by laudanum, and ether, the dose of which must be proportioned, and repeated according to the violence of the fit; afterwards the use of the aromatic tincture of rhatany root, or compound tincture of chamomile and ginger, as directed No. 7; avoiding costiveness, by the occasional use of the cathartic extract, No. 46, with a generous diet and abstinence from spirituous or fermented liquors, will effect a cure.

WARTS.

Warts are organised bodies, and evidently a kind of parasitical or independent life, like the fungous of a tree. Whatever, therefore, proves destructive to the life of parasitical animals, will, by frequent application, destroy warts; such as strong solutions of steel or arsenic, as noticed under the treatment of cancer.

When warts have narrow roots, they may be easily removed by ligature; but when the bases are broad, they may be as effectually, but not so expeditiously destroyed, by rubbing the surface every second morning with a little lunar caustic, till they entirely disappear.

The influence of the imagination in destroying warts, is very extraordinary, many instances having occurred of their gradually disappearing after the use of a charm, which could operate only on the mind. It has been observed, when the person has not had confidence in the mystic remedy, it has uniformly failed.

OF WATERY HEAD.

This disease is almost peculiar to infants, and chiefly those of a scrofulous and ricketty habit. It rarely occurs after the fourteenth year.

The symptoms are not at first clear. It commences with slight pain in the head, generally across the brow; as the effusion of water increases, the child becomes affected with nausea, sickness, starting in the sleep, screaming, and other disorders of the animal functions, as convulsions, &c. without any apparent cause; at length the brain becomes so compressed as to produce dilation of the pupils of the eyes, a variable pulse, with evident stupor. It is commonly fatal.

TREATMENT.—Unfortunately the nature of this disease is rarely ascertained, till the effusion of serum is so considerable as to render all efforts to produce its absorption ineffectual. It is probably the consequence of an inflammatory or increased action of the membranes of the ventricles, &c. and if it were at first detected, an effusion might be prevented by the application of a large blister on the head, leeches to the temples, and the use of brisk purges, as calomel, or the basilic powder, No. 36. When this stage has passed over, the most active means must be employed to stimulate the absorbent vessels, for the removal of the accumulated serum; for this purpose a per-

petual blister over the scalp, gentle electric shocks through the head, and the exhibition of mercury, are the most powerful remedies.

One grain of calomel may be given in a little jelly three times a day, or a scruple of the strong mercurial ointment may be rubbed on the inside of the thigh or arm twice a day, till it enters the skin. Some practitioners recommend the ointment to be rubbed over the blister for the purpose of being more speedily taken up into the system; and if the patient can bear it, it is certainly to be preferred. Five drops of the muriated tincture of steel may likewise be given in a little water two or three times a day, and the strength of the system supported by beef tea and wine.

As this disease, when far advanced, is generally considered incurable, medical aid should be resorted to on its first attack, in order to prevent its arriving to that hopeless stage.

OF WEN.

The tumor termed wen, is situated on the front of the neck, between the windpipe and skin. Several remedies have been suggested for the cure of this disease, of which the burnt sponge has answered best. Lozenges of this medicine have been much recommended by Dr. Cheston, an eminent physician in Gloucester, and other respectable physicians have found this form to answer best; the advantages of which are attributed to its gradual solution in the mouth. Rubbing the surface of the tumor every night with salt, has, in some instances succeeded in removing wenny substances of considerable sizes, and also the application of the hand of an executed criminal; the latter of

which can operate only through the medium of the imagination. A dead toad hung round the neck has on the same principle effected a cure.

If the burnt sponge lozenge do not succeed, the source of its nourishment may be nearly cut off, by applying ligatures to the principal arteries that supply it with blood, which, when the vessels are superficial (as is often the case) is neither a painful nor difficult operation.

There are several species of tumors that form in different parts of the human body, which derive their names from the nature of their substance. I some time since removed one from the back of a carpenter (Mr. Thomas), at Abbey Tintern, in Monmouthshire, that weighed, after it was freed from the blood, sixteen pounds twelve ounces, which was the largest I ever saw. It had been gradually growing nearly twenty years, and had latterly, from its magnitude and weight, become so troublesome as to prevent him from following his occupation, which he has since pursued with greater ease than he had done for many years. The removal of a wen (which is always situated on the anterior part of the neck) by the knife, is, on account of the great blood vessels near which it is situated, as well as are connected with it, a dangerous operation.

OF WHITES, OR FLUOR ALBUS.

This disease consists in a slimy or puriform discharge from the passage leading to the womb, termed vagina. It varies in appearance, consistence and quantity, in different persons. It generally proceeds from the vagina, but sometimes from the womb itself. Women of an erysipelatous habit, generally termed scorbutic, are most subject to it, and in them it proves very obstinate.

CAUSES.—Frequent miscarriages, difficult labour, and debility, are enumerated as causes of this disease. As it often occurs in women of robust constitutions, and in every other respect perfectly healthy, it is not always to be considered a disease of weakness, but as arising from a morbid action of the mucous glands of the vagina, or some organic disease of the womb.

TREATMENT.—When it arises from relaxation, the following mixture will succeed in curing it :

Take of extract of rhatany root, two drachms ; Epsom salt, three drachms ; sweet spirit of nitre, two drachms ; aromatic tincture of rhatany, seven drachms ; pure water, eight ounces. Mix. Two table-spoonfuls to be taken two or three times a day.

If the discharge be considerable in quantity, or vitiated, two drachms of the balsam copaiba (well blended in a mortar, with two drachms of gum arabic dissolved in double the quantity of water,) may be added to the above mixture.

Cold bathing, or the local application of cold water, by means of a *bidet*, is a very important remedy for this disease, and should be used every morning, provided the patient be free from cough or difficulty of breathing.

If the discharge continues after the due employment of these means, an astringent lotion may be made use of with advantage, as the following :

Take of the pomegranate rind, bruised, three drachms ; boil in a quart of water to a pint and half, then strain and add, alum, a drachm and half.

To be injected up the vagina, by means of a female syringe. The due employment of these remedies, with moderate exercise and a nutritious diet, will generally succeed in curing the disease.

If the stools are of a pale clay, or very dark colour, or the patient be subject to erysipelas, one grain of calomel should be taken every other night for about ten days or a fortnight.

When it arises from relaxation, these medicines, with the use of the astringent injection (twice a day) I have never known to fail in the most obstinate cases.

When fluor albus occurs in a person of a robust and sanguine habit, it may be considered of an inflammatory nature, in which case, instead of tonic medicines above recommended, the patient should take every, or every other morning, two drachms of the Epsom salt, as directed page 7, and ten grains of nitre powder, with fifteen of gum arabic powder, in a glass of barley water or almond emulsion, three times a day; which, with a low diet (free from all kind of stimulants), will succeed in curing it. To these remedies the application of cold water, by means of the *bidet*, will prove a powerful auxiliary.

If the Epsom salt should occasion more than one or two motions in the course of twenty-four hours, the dose should be diminished, or taken less frequently.

When the discharge is of an *ichorous* nature, and of a *dark* or *yellowish* colour, and attended with *pain* in the region of the womb, or with inflammation, burning heat, difficulty or heat of urine, troublesome itching, a sense of bearing down, and a frequent inclination to go to stool; pains on the approach, or during the time of menstruation; and particularly if pieces of coagulated blood (generally termed clots) are discharged, some *organic* disease of the womb may be suspected, especially if they occur about the time of the cessation of the menstrual discharge; in which

case the patient should lose no time in availing herself of the advice of an experienced surgeon.

The diet must depend on the general health of the patient. If she be weakly and of a delicate constitution, it should be nourishing and easy of digestion, such as blanc-mange, and the vegetable and animal jellies, with a small portion of meat; a little good port, or white wine, may also be allowed, but water should be adopted in lieu of malt liquor; and if the complaint be attended with much irritation or pain on making water, it will be adviseable to avoid pepper and much salt, but not otherwise. Warm diluent liquors, as tea and coffee, and the use of spirituous liquors, are very improper, and will certainly counteract the effects of medicine.

OF WHITE SWELLING.

This disease is generally of a scrofulous nature, but sometimes the consequence of frequent and violent attacks of rheumatism. The former begins in the extremities of the bones or cartilages of the joints, while the latter is seated principally in the ligaments, and may be relieved as already directed for rheumatism. The knee, ankle, and elbow joints, are generally the seats of this disease. The *scrofulous* white swelling begins with acute pain in the interior part of the joint, which is sooner or later succeeded by a gradual enlargement of the ends of the bones forming the joint, with a distension of the veins of the skin surrounding it.

TREATMENT.—The object of topical management is to prevent the formation of matter, by the application of leeches or cupping, which should be repeated every, or

every other day, according to the urgency of the case ; the whole joint should then be kept continually wet and cool, with the following lotion, by means of folds of old linen :

Take of crude sal ammoniac, half an ounce ; dissolve in spring water, one pint and half ; then add vinegar, half a pint.

Two drachms of either of the neutral salts, No. 2, should be taken every morning, and the medicines already recommended for the king's evil, to correct the scrofulous diathesis of the system.

In all diseases of the joints, particularly white swelling, the use of distilled water is a most important remedy. It should not only constitute the patient's beverage, but be employed in every article of diet, viz. in the making of tea, coffee, broths, &c. The diet should be low, and consist principally of vegetables, broth, and milk, till the diseased part be in a quiet state. Such is the opinion of Dr. Lambe, of the alterative powers of this water in those cases, that he is persuaded that by its general use, even without any local application or medicines, diseased joints may generally be recovered. As it does not interfere with the means suggested, it is certainly adviseable to adopt its use.

After the local affection is evidently abated, the cure may be completed by the application of small blisters on each side of the joint, the discharge of which should be kept up by dressing them every morning with the savin ointment, No. 44 ; for which purpose the thin skin of the blister should be entirely removed. The limb should be kept perfectly quiet, and, when free from pain and inflammation, the joint may be moved a little once a day, to prevent adhesion and consequent stiffness. By the external irritation and discharge of blisters, continued for a length

of time, with medicines calculated to correct the constitutional affection, and at the same time to support the strength of the patient, as recommended for the treatment of king's evil, many limbs have been saved, which by a hasty surgeon would have been condemned to the knife. The profession is much indebted to Mr. Crowther of London, and Mr. Russel, of Edinburgh, for many valuable observations on this disease. When the blisters are healed up, the plaster of gum ammoniac and cicuta may be applied with advantage. The same local treatment is proper for the enlargement of a joint from rheumatism, which, if attended with fever, requires the constitutional remedies as recommended for acute rheumatism.

OF WHITLOE, OR FELON.

This disease consists in an inflammatory swelling of the end of a finger, the pain and obstinacy of which depend on the part attacked: if the skin be only affected, the pain is trifling, and after the effused fluid is discharged, it soon heals, without endangering the nail; but if situated in the membrane beneath the skin, which is generally its seat, the symptoms are more violent; and if the membrane covering the bone be affected, the inflammation often extends to the hand, and the pain up the arm. The lymphatic vessels, and the gland in the arm-pit, are also often inflamed; in this latter case, if the disease advance to suppuration, the bone is generally rendered carious.

CAUSES.—It frequently occurs from external violence, particularly from punctures and bruises, but it happens more frequently without any evident exciting cause, in

which case it is probably connected with a bad habit of body.

TREATMENT.—As the matter that forms in this disease is generally of that acrid nature as to corrode the soft parts, and even the bone, it will, in all cases, be adviseable to prevent suppuration by applying four or five leeches, and encouraging the bleeding by immersing the hand in warm water after the removal of the leeches; when the bleeding has ceased, the finger should be wrapped up in soft linen, and frequently moistened with spirit of wine. The aperient mixture, No. 62, taken as there directed, will also be necessary, and if the patient be of a plethoric habit of body, or the arm much inflamed, six or eight ounces of blood should be taken from the arm. If these means should fail of dispersing it, an incision should be made into the part, nearly to the bone, which will effectually prevent suppuration, and thus preserve the nail and the bone.

When an effusion of serum has taken place, it should be let out as soon as possible, to prevent it increasing the internal mischief, particularly if deep seated. A poultice may then be applied, which, with the occasional use of a little brandy, will effect a cure. But so many untoward circumstances happen in those cases, such as caries of the bone, the formation of fungus under the nail, &c. that it will always be adviseable to apply to an experienced surgeon, whose timely assistance will not only prevent much mischief, but save the finger.

OF WORMS.

The worms that infest the human body may be reduced to three general classes, viz. *ascarides*, or small round and

short worms, which chiefly occupy the lower intestine; the *teres*, or round and long worm*, which are generally seated

* This worm, from its general resemblance to the earth worm, has been often confounded with it: they, however, differ materially in their structure. As this circumstance is not generally known, I shall briefly notice in what their difference consists. On examining their outward appearance with attention, the *teres* or human worm will be found more pointed on both extremities than the common earthworm. The mouth of the *teres* consists of three rounded projections, with an intermediate cavity; whereas the mouth of the earth-worm consists of a longitudinal fissure, situated on the under surface of a small round head. Upon the under surface too of the *teres* there is a large semilunar fold of skin, into which the head retreats, and out of which it is elongated, which is entirely wanted in the *teres*. The anus of the *teres* is situated on the under surface of the worm, a little way from its posterior extremity, and appears like a transverse curved fissure. The anus of the earth-worm is an oval aperture at the very extremity of the worm. The outward covering or skin of the *teres* is less fleshy and not so strongly marked by transverse rugæ as the earth-worm. In the latter there is often to be seen a broad white band surrounding the body of the worm; but in the *teres* this is entirely wanting. On each side of the *teres* there is a longitudinal line well marked; in the other worm there are three such lines upon the upper half of its surface, but very faintly marked, so as to be hardly discernible. The *teres* has nothing resembling feet, whereas the earth-worm has on its under surface and towards its posterior extremity a double row of processes on each side, very evident to the eye and finger, which manifestly serve the purpose of feet on the locomotion of the animal. The internal structure of both animals is also extremely different: in the *teres* there is an intestinal canal, nearly uniform and smooth in its appearance, which passes from one extremity of the worm to the other. In the earth-worm there is a large and complex stomach, consisting of three cavities, and the intestinal canal is likewise larger and more formed into sacculi than the former; the parts subservient to generation are very different in both: there being in the *teres* a distinction of sex, the parts being different in the male and female, whereas the common earth-worm is an hermaphrodite. Many other differences would no doubt be found by a person who might choose to prosecute their anatomy minutely.

in the small intestines and stomach ; and the *tænia* or tape worm, which for the most part possesses the whole tract of the intestinal canal, and from the testimony of some medical authors, are from two to forty feet long.

The *teres*, or round and long worm, is much more commonly found in the intestines of children than adults.

SYMPTOMS.—The symptoms denoting the existence of worms are common to the different species, viz. indigestion with a variable appetite ; foul tongue ; offensive breath ; hard, full, and tense belly ; with occasional gripings and pains about the navel ; heat and itching sensation in the rectum and about the anus ; the eyes heavy and dull ; itching of the nose ; short dry cough ; grinding of the teeth* ; and starting during sleep, attended often with a slow fever.

CAUSES.—As worms are generally found only in persons of weak digestive organs, indigestion may be noticed, if not the principal cause, at least favouring their generation. There is nothing, however, in the economy of animals, more involved in mystery than the origin of intestinal worms. Were they found to live in situations out of the bodies of living animals, one might readily suppose that their eggs were taken into the body with the food or drink, and there gradually evolved into animals ; this, however, is not the case ; they are evidently incapable of existing for any length of time in any situation, except within a living animal body, which appears to be the proper place

* This strong involuntary action of the muscles of the lower jaw is a proof how much the muscular system is affected by irritation in the stomach and bowels.

for their growth and residence. We might, therefore, be led to another supposition, viz, that they are really formed from the matter contained in the intestines, which previously had no regular organization; but this idea is widely different to all analogy in the production of animals. The origin, therefore, of such animals is a subject of much obscurity. That they are not produced by ovula of animals taken with the food, is not only obvious from their being found in the liver and brain, and from the frequency of another kind of animal so frequently generated in the kidneys, brain, and liver, named hydatids*.

TREATMENT.—The indications of cure are, first, to clear the stomach and intestines of redundant slime, and afterwards to strengthen the stomach and bowels, so as to destroy the disposition to their generation.

The first object is best accomplished by brisk cathartic medicines, as the basilic powder, No. 36, a dose of which should be taken every second or third morning, for at least a fortnight, and the tonic mixture, No. 77, in the intermediate time. Lime water being capable of dissolving the mucus in which the worms are involved, may be taken in

* There is not the least doubt but hydatids are animals; they have been seen to move when taken out of the liver, and they retain their power of motion for some time when put into warm water. The origin of such animals is extremely mysterious, and when the whole evidence of one and the other opinion is compared together, the grounds for believing, that in some orders of animals equivocal generation takes place, appears stronger than those for a contrary opinion. Those who wish to consider those animals more minutely, will find an excellent account of them, published by Dr. John Hunter, in the Medical and Chirurgical Transactions, p. 34.

the quantity of a tea-cupful, two or three times a day, during the operation of the basilic powder, and with the tonic mixture; the electuary of tin, No. 86, page 73, may likewise be taken every morning and evening.

In domestic medicine, an infusion of Indian pink has been generally employed for the destruction of worms in children, and often with success. The giddiness, stupor, dimness of sight, redness and pain in the eyes that sometimes affect the patient during the use of this medicine, prove that it should be administered with caution, and not till after safer vermifuges have been tried in vain. The decoction of quicksilver is also a popular remedy, but I conceive equally unsafe.

Powdered rust of iron is a very excellent vermifuge medicine, and where the complexion of the patient is pale, or the system weakly, is preferable to any other; but when the countenance is florid and the habit evidently plethoric, it is not so proper as the basilic powder, No. 36, page 73. The powdered rust of iron is recommended by Dr. Rush to be given from five to thirty grains, in a little currant jelly or brown sugar, for children between one and ten years old. Of all the worm medicines that I have administered, observes this eminent physician, I know none more safe and certain than this simple preparation of iron. If ever it fails of success, it is because it is given in too small a dose. Taught by an old sea captain, who was cured of tape worm by this medicine, Dr. Rush has given to adults from two drachms to half an ounce of it every morning for three or four days, not only with safety, but with uniform success; the addition of ten grains of granulated tin has been found to increase its vermifuge powers.

The hairy down which covers the pods of cowhage, made into an electuary with treacle, has been much recommended by Dr. Bancroft, and Mr. Chamberlayne, surgeon in London. The electuary, in the dose of a tea-spoonful, is said to be perfectly safe, and that two or three doses generally suffice. As its effects are attributed to its mechanical action on worms, it may also act on the intestines of infants, particularly if the natural mucus is abraded.

The common male fern root has been much extolled as a certain remedy for the *tape*-worm, the following directions are given for its use :—"Two or three drachms of the powdered root to be taken in the morning, no supper having been taken the night before. It generally sickens a little. A brisk purgative with a little calomel, (as the basiliac powder, No. 36), is to be given a few hours after, which sometimes brings off the worm entire ; if not, the same course must be followed at due intervals." For the success of this remedy, it is necessary the root should be *recently* gathered ; for after being kept long in the shops, its activity is diminished or destroyed. It should be used recently dug, being brought to a state fit for powdering, by drying it in a gentle heated oven, or within a gentle heat of a fire.

The *ascarides*, or round short worms, are principally lodged in the lower intestines, and through being enveloped in mucus, are often very difficult to dislodge ; with the use of the basiliac powder it will be proper to inject the following by means of the lavement syringe :

Take of martial flowers, twenty grains ; lime water, eight ounces.
Dissolve the flowers in the lime water. To be injected warm.

A strong decoction of Indian pinks, with common salt, has been recommended by Dr. Clarke ; and a solution of

asafoetida in water and tobacco fumes, by other eminent physicians, to be thrown into the rectum. The muriated tincture of steel would probably prove more powerful, if the worms were not so defended from its action by the mucus in which they are so completely invested. Soap lees has been recommended for dissolving the mucus, but it often produces considerable irritation. The repeated use of the basilic powder, with the injection of the solution of steel, as above directed, generally succeeds in destroying them.

PREVENTION.—For the prevention of worms it will only be necessary to attend to the state of the digestive organs, and to avoid such diet as is likely to derange them, as acid or unripe fruit, fermented liquors, &c. If the pale or dark appearance of the fæces should indicate a deficiency of the secretion of bile, the patient should take half a grain of prepared calomel at bed-time, for five or six nights ; for nothing is more destructive to the life of worms than a proper secretion of bile ; and I believe the success of mercury is more owing to its increasing the biliary secretion than any immediate effect on the worms.

Children are very subject to an irritative fever, from having been indulged with too great quantities of fruit or ascescent food, which is generally attended with the symptoms I have noticed as denoting the existence of worms. This fever has therefore been termed by Dr. Musgrave the *Spurious Worm Fever* ; and latterly by Dr. Butter, the *Infantile Remittent Fever*. Dr. Hunter states that he dissected “ a great number of children, who have been supposed to die of fever arising from worms, in whom he did not discover the least appearance of worms.” This fever is evidently symptomatic of a disordered state of the

digestive organs, and may be cured by a gentle emetic of ipecacuan powder, the occasional use of the basilic powder, No. 36, and a little stomachic medicine, as chamomile tea, with the prepared natron, as directed No. 60, which will also prove of service should the fever arise from worms.

No disease offers such a field for the imposition of quacks as worms. Mercury is the basis of all the vermifuge nostrums that have fallen under my examination; although in the directions the proprietors solemnly declare, that not a "particle of mercury enters their composition, and that, from their mildness, they may with safety be given to infants at the breast, and that no extra attention is required during their operation." The articles with which mercury is mixed to form it into lozenges becoming acid by keeping, the mildest preparation of mercury may be thus converted into a powerful poison, nearly equal in violence to arsenic; besides, the mercury not being well blended with the other ingredients, from the quantity that is made at a time, it may, and I know it has happened, that one nut has contained an over-dose of mercury, while another in the same box has scarcely contained any. To these circumstances the many fatal effects that have followed the exhibition of advertised remedies for worms may be attributed.

In consequence of the request of several friends of this work, the author has ordered the Basilic Powder to be kept at the Chemical and Medical Hall, 20, Bedford Street, Covent Garden, well blended with gingerbread, and carefully divided into nuts, containing twenty grains each, which, in consequence of being well mixed may be divided into

doses proportioned to the age of the patient. In this form it is readily administered to children, and the ginger in the composition, corrects its griping quality—besides the most active part of the medicine being very ponderous, is frequently lost by being administered in a thin vehicle.

MEDICINE CHESTS.

The different Medicine Chests, described page 156, of this work, are kept completely fitted up for use, at the Chemical and Medical Hall, 20, Bedford-Street, Covent Garden. This institution is established for the purpose of supplying the public with genuine drugs, and the most choice chemical preparations.—No article being allowed to be sold, or employed in the composition of medicine, without being previously inspected by the author, he assures his readers that the greatest confidence may be placed in every article procured from it.

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